FOGHORN

The Monthly CP/M Publication of FOG

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FOG is a users' group for all persons who use or are interested in personal computers. Membership is available to anybody whether or not s/he currently owns a computer. The **FOGHORN** is published monthly by **FOG** for its members and covers the CP/M operating system. An annual **FOG** membership of $25 includes bulk mail delivery of the **FOGHORN** to an address in the US. For an extra $19, you also can receive the **FOGHORN**'s sister publication, **FOGLIGHT**, which is devoted to 16-/32 bit systems. A $1 discount on both the first and second publications applies for payment made by cash, check or money order. See the chart page 63 for the additional postage required for locations out of the US. Address all inquiries to **FOG**, P.O. Box 3474, Daly City, CA 94015-0474. The voice phone is (415) 755-2000.

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This issue was produced using Fancy Font and Laser Fonts (donated by SoftCraft, 222 State Street, Madison, WI 53703) with a WestWind AT (donated by WestWind Computers, 1690 65th Street, Emeryville, CA 94608) and an HP LaserJet+.

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FROM THE FOG

FOG Moves Into Desktop Publishing

by Joanne Bransdon

FOG has moved into the desktop publishing age . . . and you are reading our first effort! The October **FOGLIGHT** also has been produced totally in-house.

Currently we are doing all production on a WestWind AT (using NewWord) and a HP Laserjet Plus. Fancy Font (the MS-DOS version of the top little software package many of you may have used on your CP/M computers) and Laser Fonts from SoftCraft produces the camera- ready art.

Some of the editing work also is being done with WordStar on an IBM-PC before being transferred to the AT. We hope to add another HP printer in the not too distant future.

And what does this mean? For **FOG**, it means big savings in production costs, a better looking and designed publication and one that is as accurate as we can make it.

Our move to desktop publishing has put an end to expensive typesetting. "Doing it all ourselves" is saving us about $1000 a month in typesetting bills for the **FOGHORN** alone.

Then there is the end to the frustrating delays. Now we don't have to fit into a typeset house's schedule nor wait for galleys to be done and delivered and often redone again and again to eliminate errors.

Often just to meet the **FOGHORN** production deadline, we had to let some things go through that we would rather have changed – had there been the time (and an endless supply of cash to pay for them).

Now we have the time and the cost is minimal. As we edit each article, we can print it at minimal cost (less than 25¢ a page), and immediately fix errors or improve the "look" of each page.

These changes can include editing text to expand or delete length or to "close up" large white spaces in lines, breaking or combining paragraphs, and the use of such features including space, indents, bolding, italic text and underlining to improve the finished design of each article.

Desktop publishing also has eliminated one of the most tedious (for me, anyway) jobs – the pasteup. Thank goodness for an end to the hours and hours spent hunched over a light table with hot wax, unwieldy galleys, scissors, tape, rulers, etc., etc!

So while one person can virtually produce a **FOGHORN** on their own, there actually is more time to spend in getting a polished production out to you. The only pasteup required is to insert the half page and quarter page adverts into text. And one of our advertisers is sending us their ad in Fancy Font which means it is just incorporated into the the files.

As each article is completed it is written into a section file, e.g, *Systems*, *Novice Notes*, etc. and printed out with the necessary editing and rearranging of text completed to make the pages "fall" properly. When all the sections are completed, the adverts are inserted and a batch file set up to print the finished product. (A page of the **FOGHORN** takes about a minute to print.)

Hats off to Gale for all the work she did designing fonts, setting up a **FOG** "desktop publishing user's manual", and installing Fancy Font. *[A very special thanks to Gordon Byom from SoftCraft for all of his help. It is especially rewarding to work with a company which provides such prompt and efficient end user support – Gale]*

I think the **FOGHORN** looks great – neater, cleaner and more professional. What do you think?

* * * * * * *

Starting Out in Computers? This Issue is Specially For You

by Ron Forsythe

This month's **FOGHORN** is devoted to the novice. To those of you who have just bought your first computer, are just discovering CP/M and MS-DOS, or who have just changed from one operatiang system to the other, we hope we can answer some of your questions here.

I have a sign above my desk which reads "*Anything is easy, once you know how*". The only trick to making computers easy to use is to learn to understand how to use them.

Keep in mind that computers themselves are very stupid.

They understand only two things; on and off. The computer itself makes no assumptions. It understands only what it is told.

When we communicate with our computers, we have to learn how to come down to the computer's level. An expert in computers isn't necessarily a genius – just someone who is flexible in his or her thinking.

The basic philosophy of **FOG** is that we learn by working together. My recipe for becoming computer literate contains four ingredients:

* First, read your owner's manual;
* Second, reinforce learning with a monthly dose of **FOGHORN** or **FOGLIGHT**
* Third, experiment freely; and
* Fourth, go to your **FOG** local group meetings.

The most often overlooked resource available to **FOG** members is the local group meeting. Each issue of **FOGHORN** contains a listing of local **FOG** groups, complete with a telephone number for a contact person.

As a **FOG** member you would be a welcome guest at their meeting. Bring a friend if you like. If you have a transportable computer, bring it along too.

You already have two things in common with everybody else at the meeting:

You have a computer, and

You have questions.

Don't try to reinvent the wheel. If you have a problem, there is no need for you to have to solve it by yourself. There is a good chance that someone in the group has had a very similar problem before, if not the exact same one.

If you don't see a group listed that is in your area, drop us a note. We will check our records to see if there may be a non-affiliated group close to you.

You also will find answers to a myriad of questions in the pages of the **FOGHORN** and **FOGLIGHT**. We have back issues available for a nominal charge. Each is packed full of product reviews, short cuts, and helpful hints – from Novice Notes to Writing Tools.

The inside back page of this issue contains further information on ordering back issues and other **FOG** merchandise. At the very least I would recommend ordering the *Best Of Volume I* and *II*.

If you use WordStar, you can find help in the booklet *Pocket Guide to WordStar* by Tony Bove and Cheryl Rhodes. This flip-up guide includes a chapter entitled Pocket Guide to CP/M which covers the primary commands used with CP/M 2.2 and CP/M-86.

While the commands are referenced to their use with WordStar, the information is also valuable to understanding how other programs relate to the operating system. The remaining chapters then walk you through WordStar's many commands. **FOG** has a limited number of copies of *Pocket Guide to WordStar* available for $7.25 each.

If you are not yet a member of **FOG**, now is the time to sign up. By joining now, you can get a 2400 baud modem and telecommunications software, with **FOG** membership for only $324.

We have sold out of the modems twice, but CTS Corporation, the modem manufacturer, is doing its best to keep us restocked.

With a modem and **FOG** membership, you will have access to the **FOG** Remote Bulletin Board Network. These are independently owned and operated computer systems which serve as message bases for hundreds of computer users. On them you can leave electronic mail or browse through megabytes of public domain software which you can transfer to your computer over the telephone line.

One warning though; use of modems is habit-forming and can be hazardous to your telephone bill.

Lastly, don't forget about the **FOG** library. At a recent user group meeting a new member asked me some technical questions about writing an applications program. This member didn't want to spend hundreds of dollars for commercial software. He was delighted when I told him of the hundreds of programs in the **FOG** library that are available free.

Their are many benefits to being a member of **FOG**. The extent to which you make use of you membership is up to you.

* * * * * * *

ADVERTISEMENT

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Write-Hand-Man only works with CP/M 2.2, ZRDOS and CP/M 3.0 (please specify). Simple terminal configuration required. Not available for TurboDOS. Compatible with keyboard extenders, hard disks, and other accessories.

Poor Person Software
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415-493-3735

Trademarks: Write-Hand-Man — Poor Person Software, CP/M—Digital Research, *Sidekick*—Borland International

Summary of Significant Actions

The Board of Trustees of FOG has unanimously approved a motion, suggested by the ByLaws and Policy Review Committee, to publish a summary of significant actions of FOG Board meetings in FOGHORN and FOGLIGHT.

Below is the summary from the Board meeting of September 6, 1986. This does not represent the entire minutes of the meeting, but is a capsulized version of actions approved by the Board. Items which were withdrawn, tabled, referred to committee, or which were not passed by a vote of the Board, are not included. The full minutes may be obtained after the next Board meeting.

1. Laser Printer: FOG will purchase a laser-printer and software for typesetting of the FOG publications.

2. Century Membership: A membership class to be known as "Century Membership" is established. Century Membership will consist of complementary annual renewals of FOG membership and subscription to one publication through December, 1999 in exchange for a donation of $199 to FOG. A Century Membership with subscriptions to two FOG publications through December, 1999 is established for a donation of $349. Any surcharge for first class postage will be billed annually at the rates then current throughout the duration of the Century Membership. The Century Membership offer shall expire when 250 are awarded, or on 1 March 1987; whichever shall come first.

3. Associate Membership: A membership class to be known as "Associate Membership" is established. An Associate membership includes full rights, benefits and privileges of full membership with the exception of receipt of the FOGHORN or FOGLIGHT publications. Dues for an Associate membership are set at $19 per year. Associate membership is available only to those living outside the United States or those who already have a full FOG membership at the same address.

4. Terms of Office: An initiative will be placed on the ballot for a vote by the general membership that no individual may serve more than two consecutive terms on the Board, to apply to members elected on or after the election of March 1987.

5. Publication of a Summary of Significant Actions: The Summary of Significant Board Actions will be published in the FOGHORN and FOGLIGHT.

6. Election Material: The ByLaws are revised to allow election material to be sent by bulk mail rather than first class to reduce election expenses.

7. Electronic information service: FOG will negotiate an arrangement with GE Information Services for establishing a FOG Round Table Forum on "GEnie". Executive Committee or Board action will be required to approve any agreement.

8. AMQ Computer: AMQ (MS-DOS computer) is added to the list of FOG supported machines.

9. Membership Rebates: FOG rebate structure is defined to designated a rebate to Affiliated Member Organizations of $6 for primary and associate members. No rebate will be made for Century Memberships which are donations to FOG.

10. Next Board meeting: December 13, 1986.

* * * * * * *

FOG Supporters

Again this month we would like to extend our appreciation to those who have volunteered their time and effort to keep the FOG effort going.

We would like to extend a special thanks to the many volunteers who are the backbone of this great organization. These include the officers of our Affiliated Member Organizations around the world; the Presidents who plan and direct local meetings, those who put together the newsletters and meeting notices, the Librarians who keep the local libraries up-to-date, and the members who volunteer their expertise for presentations and demonstrations at local meetings.

Another group of special volunteers are those who maintain the FOG Remote Systems. These System Operators (SysOps) volunteer a minimum of 20 hours a month (some much, much more), to open world of telecommunications to other members. The SysOps who make up the FOG Remote System Network do so without financial support from FOG. The Remote System at the FOG office is the only one which uses FOG equipment. A few of the systems receive financial support from their local AMO; most are run on thousands of dollars of computer equipment belonging to the SysOp. A special FOG salute to the SysOps whose contributions have made the FOG network a reality.

Thanks to those who have helped by volunteering time at the FOG office, including Rick Lane, Jim Cummings, Jay Johnson, Dave Luehring, Malcolm Schetky, Benn & Lois Clouser, The Harris Family (Fred, Linda, Fred Jr, & Stephen), Joe Richards, Irv Sacks, Roy Crouch, Dick Ezzard, Adam Heilbrim, Pat Watters, Brad Rolendar, Lou Polk, Bill Weeks, Robert Klingen, Tip Partridge, John Scott, Jim Switz, Byron Davies, Mac Hughes, Richard Lesnick, Vic Waithman, David Haldeman, Dick Worth, Glen Stinnett, Jim Hauser, Nancy Mulvany, Claude Ostyn, Pete & Vicki Masterson, Terry Morford, and Darrell Bross.

Thanks to those who have helped by making cash donations, including Warren Hamblet, $20; Trevor Bird, $14.75; William McWeeny, $5.95; Maureen Moran, $10; Maj. James Cook, $10; David Zapala, $5; Wayne House, $5; Wayne Leman, $10; R. Fairchild, $10; Joseph & Elizabeth McHugh, $50; John Keenan, $200; Boston Osborne Group, $300

And last, but not least, thanks to those who have made donations of hardware, software and computer manuals. These include SoftCraft; boyd & fraser publishing company; T/Maker Company; Data Bank Computer Products; Boardman, Braun & Brooks, Inc.; Mark Allen, Pilot Video; Robert Sadler; Whitney Boutin; Ronald Lendon; and Marvin Hammer.

* * * * * * *

THE ENHANCER! $35

THE ENHANCER has been getting rave reviews from thousands of satisfied users. If you use WordStar then you owe it to yourself to try THE ENHANCER. We offer a 100% guarantee of satisfaction, or your money back -- how can you lose?

- Makes WordStar MUCH FASTER to load and MUCH FASTER to respond when you press a key.
- Lets you choose default (startup) settings for WordStar in a very straightforward and easy to understand manner, so that every time you run WordStar you will find everything tailored to your needs.
- Turns off the annoying copyright message and signon logo.
- Gives you AUTOMATIC LOG-TO-B: DRIVE if desired.
- Installs a true 'printer-busy' test so that WordStar can do simultaneous editing while printing.
- OSBORNE VERSIONS also provide automatic screen key setting & resetting, a blinking cursor (on/off/variable rate) and make the "INSERT ON" prompt visible at column 40.
- Installs WordStar to drive your dot-matrix printer, so you can get easy access to all the features of your printer from within your WordStar documents. Depending on your printer you'll get:

Pica	
Elite	
Condensed	Strikeout
Double-Pica	Draft quality
Double-Elite	Letter quality
Double-condensed	6 lines/inch
Italic	8 lines/inch
Bold	Superscripts
Continuous underlining & MORE --	Subscripts
TO THE LIMITS OF YOUR PRINTER!	Doublestrike

Here's what customers are saying about THE ENHANCER:

"This is the best purchase I ever made (besides my OSBORNE)"
"I can't believe it was so easy! Thank you, thank you, thank you!"
"I tried to use an un-enhanced WordStar -- I couldn't stand it!"
"Worth its weight in gold! It solved ALL my printer problems."

TURBO-XT CLONE $995

These IIOT systems are the same ones we use in our own offices. We know you'll be as happy with them as we are -- we GUARANTEE it! You get a complete assembled and tested starter system with :

- 8-Slot Turbo motherboard (8 or 4.77 MHZ)
- An XT-style case with EZ-access top
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- 640K of fast memory
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- A clock/calendar
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100% IBM-compatible!

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10 MEG hard drive w/controller	$399
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MS-DOS w/ gw-Basic	$89
Extra Serial port	$49
Accelerate 8/16 w/V20 chip	$99
..... SWAP-OUT PRICES	.....
Color card/monitor	$395
EGA super hi-res video card	$395
EGA-compatible color monitor	$595

MIX EDITOR $39

This fantastic program is a complete, WordStar-compatible, fully-programmable split-screen text processor. Although it can be used for plain old word processing (like WordStar's non-document mode) it is really designed as a programmer's editor. Full macro facility lets you locate complex patterns and change them in ways that vary according to context. Split the screen vertically or horizontally to edit two files at once, with ability to move text freely from one to the other. Redefine any keystroke as any other. Easily customize the program to your needs by using convenient setup files. TOP-NOTCH!

MEDSTAT $99

MEDSTAT is a great new package designed for all those who are involved with design and evaluation of experiments. Quickly and easily find out how many experimental subjects will be needed to achieve a given confidence level or what confidence level can be expected given a fixed number of experimental subjects. Select from menus including many of the common statistical calculations used in the health sciences. Functions are broadly organized under the following menu headings:

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- SAMPLE SIZE & POWER
- FISHER'S EXACT TEST
- SENSITIVITY AND SPECIFICITY
- T-TESTS
- REGRESSION ANALYSIS
- STRATIFIED ANALYSIS
- DESCRIPTIVE STATISTICS
- P-VALUES <--> T & Z-SCORES

STEM $199

STEM stands for STATISTICS & ECONOMETRICS for MICROCOMPUTERS. It is a very complete and easy-to-use package, currently available only for the OSBORNE 01 computer. Features of the package include:

- N-WAY ANALYSIS OF VARIANCE & COVARIANCE
- COMPLEX ALGEBRAIC TRANSFORMATION OF DATA
- SUB-SAMPLING • DATA SORTING • PROJECTIONS
- PLOTTING
- ANALYSIS OF STATISTICAL DISTRIBUTIONS
- CORRELATIONS & MULTIPLE REGRESSION
- AUTOCORRELATION ANALYSIS & CORRECTION
- HETEROSKEDASTICITY & MULTICOLINEARITY
- TWO-STAGE LEAST SQUARES PROCEDURE
- UNEQUAL CELL FREQUENCIES
- MISSING OBSERVATIONS & REPEATED SUBJECTS
- FREE LINEAR PROGRAMMING PACKAGE!

LOAN AMORTIZATION $59

Professional package rapidly calculates, displays and prints loan repayment schedules for a variety of loan types including level payments, balloon payments, multi-level payments, variable interest rates, FHA245 loans, and user-specified payments. Calculate principal, interest, duration, or level payment if the other three quantities are known. Another winner from COMPUMAGIC!

MOON BUGGY $19

We guarantee you'll love this fast-paced arcade-style game for the OSBORNE 01. I wasted hours playing this one!

GAMES PAK $29

Games Pak was previously sold as three separate packages -- now packaged as nine games including two simultaneous two-player games. OSBORNE 01 only.

TYPING TEACHER $39

Typing teacher -on-a-disk will help you master the keyboard from basic to advanced, with challenging step-by-step lessons.

COMPUMAGIC UTILITIES $45

- CMAUTO creates customized autostart programs to perform commands and run other programs on boot-up.
- ERASE, FILECOMPARE, RENAME & COPY all accept complex wild card options and/or input from lists.
- DOUBLESPACE & WORDCOUNT are indispensible tools for authors. Perfect with WordStar files.
- TYPIT turns your computer and printer into a memory typewriter with one-line editing capabilities.
- SORT performs a fast line-by-line sort on any file.
- SCREEN captures everything going to the screen and copies it into a file for later use. Great for teachers or anybody producing documentation.
- A:COM lets you use ; instead of : with drivenames.
- MDIR gives directory listings for more than one file specification and will search more than one drive.
- DIRBAK lists only those files which have BAK files.
- DISKDIF tells what programs are on one disk but not on another.
- UDIR lists all programs in all user areas.

** special offer to OSBORNE 01 owners **
get complete UTILITIES set along with MANYKEY, SCREENSIZE, & SERIAL PORT SETTER all for $65

OTHER ITEMS...

Floppy diskettes (QTY 50)	89¢
Toshiba 1340P printer	$459
Toshiba 321P printer	$599
Toshiba 341P printer	$899
Panasonic 1093 printer	$459
Okidata ml193P printer	$595
Star Gemini 10X printer	$249
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Serial ABC switchbox (3-way)	$99
Parallel AB switchbox (2-way)	$79
Parallel ABC switchbox (3-way)	$109
Keyboard extender cable (O1 or Exec)	$20
Parallel printer cable (Osborne 01)	$30
Parallel printer cable (Executive)	$35
Parallel printer cable (Vixen)	$35
Serial printer cable (12 ft)	$24
Male-Male or Female-Female adaptor	$20
Null Modem adaptor	$20
Everex 1200 Baud modem (Hayes comp)	$249
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Turbo Database Toolbox	$50
Turbo Tutor	$30
All three Turbo packages	$139

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VISA & MASTERCARD require a $50 minimum purchase.
Shipping & Handling $3 for software, by weight for hardware.
We offer a 100% two-week money-back guarantee: you MUST be completely satisfied with your purchase! We ship UPS with a very short turnaround time on most items. Prices change rapidly in today's marketplace -- call to confirm our latest prices...

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LETTERS

Westwind XT, Drive C-2, and Trantor Hard Disk

Not long ago, I acquired a Westwind Trantor 22 Megabyte hard disk drive, a one megabyte Drive C-2, as well as Westwind's newest IBM-XT compatible computer.

Since I own three Osborne computers, I have used the earlier versions of the Drive C as well as the older version of the Trantor hard disk drive in the past.

I am writing because the difference between the older products and the new is significant. There has been a great improvement.

When I got my first Drive C and hard disk the software available to operate them was confusing and difficult. Several files were required to boot each of the hard disk and the RAM- disk. The file names made no particular sense to me. Once up and running, the computers were much more versatile and faster, but the software took considerable time to figure out and was not easy and free flowing.

By contrast, this past week I received both a one megabyte Drive C-2 and a 22 Megabyte Trantor hard disk for use on an Osborne 1. Although these systems came with some eight 8 disks of software, four of the disks were comprised of Supersize SuperCalc 2 and database programs and four were composed of Drive C and hard disk routines – in fact in double density these routines occupied less than two disks.

The big difference? With the new version of the RAM-disk, hard disk and software, loading from scratch required only copying the disks and typing two key strokes (WL for Westwind Loader.) This time the program figured out whether I had a Drive C, a Hard Drive or both then proceeded to initialize them.

The manuals accompanying the software and disks were much clearer than previously and could be skimmed easily to start the equipment quickly.

I have heard several reports of Westwind being slow in their delivery. Although my case may have been a bit unusual, it was only five days from placement of my order until receipt of five boxes of equipment and software from Westwind. Perhaps they have put their act together in this regard as well.

The Westwind XT

I also received one of Westwind's first delivered XT computers. Having worked with and repaired several different kinds of IBM-PC compatible computers, I was quite impressed with the quality of the computer, associated software and accessories in this package, especially for the price. The screen that comes with my computer was a 14" high resolution monochrome monitor with a swivel base from QUIMAX. It is the best quality I have seen.

The computer itself is a fully compatible computer in the configuration which is most adaptable for later add-on changes and improvements.

For example, it has the most expansion slots available on any XT style computer, it has the standard 135 watt power supply tucked in the corner so as to allow for four individual disk or hard disk drives and it has the power supply and cables to support that many drives.

The monochrome monitor card is fully Hercules compatible, the industry standard in high resolution monochrome graphics. The key board has a very nice touch and its return and shift keys are in the proper place (for anyone who has used an IBM-PC style keyboard you will know what I mean).

The computer comes with 640K of memory on the mother board requiring no additional expansion cards or wasted space to add memory to your system.

My computer came with a CP/M package. It included the V-20 chip (to replace the 8088 processor) and a software package that would be hard to beat called RUN/CPM. It allows the computer to run not only MS-DOS and IBM software but also the great majority of the CP/M software we have all come to love. (I will review RUN/CPM another time.)

Finally, the software included with the computer package (yes it comes bundled) is first rate. It includes NewWord (which has been written about extensively in the **FOGHORN** and which is both faster and more versatile than WordStar), SuperCalc II, a spread sheet program, and another program called SuperFile.

In addition, the operating system includes the newest version of MS-DOS (3.1 from Compaq) along with four volumes of Compaq User Manuals and MS-DOS tutorials. All are of the highest quality and are beautifully reproduced.

So you get the best version of DOS with the best support manuals and the most standard (if you are used to CP/M) software with the most generic of the IBM clones available. In fact, the Westwind-XT is the same as the Atlantic XT, a big contender in the IBM clone market.

All of these things are available from other computer companies and of course are available if you go out and seek them individually.

What makes the Westwind XT so nice is that they have done the packaging for you and the price is quite competitive. If you have aspirations for an MS-DOS system compatible with the IBM and are confused about the maze of offerings from the local computer store as well as the numerous PC related magazines by mail order you should sincerely consider Westwind's product.

With their support and all the right pieces in all the right places, this is hard to beat.

(No I don't now nor did I ever work for Westwind Computer.)

Peter S. Tippett
Cleveland, OH

* * * * * * *

Thanks to Witt Services

During a recent move, my Osborne 1 keyboard became non- functional – the letters QWERTYUI didn't work. A phone call to Mark Witt Services in Bolingbrool IL, resulted in an OAK keyboard delivered the next day.

When the problem was not resolved, I bought the machine to Mr Witt. To my embarrassment, he immediately spotted two bent pins in the keyboard attachment slot – and gingerly fixed them at no charge.

Mr Witt also now has available a modified monitor plug which simply and effectively disconnects power to the internal monitor – the simplest way of doing this I have yet seen. This new plug has ended my recurrent problems with heat which played havoc with the Screenpac board.

I was thoroughly delighted with my encounter with Mr Witt and encourage others with Osborne problems to get in touch with him.

And yes, he does answer his own phone if he picks it up first!

Thanks for all your help with **FOG** and the **FOGHORN**.

Lou Philipson
Chicago IL

* * * * * * *

Another Case of DU to the Rescue

I had just finished recovering files from accidentally erased disk directory but my heart sank when I checked the DIR and saw lengthy files gone (no backup,like a dummy I was going to work on them and then back up the whole mess).

I recalled various allusions to unerasing files, but do not have UNERA, RECOVER, etc. But I did recall a reference in Doug Hurst's article on DU about re-covering erased entries. After a lot of digging, I found it in the 9/83 **FOGHORN**.

As it happens I downloaded DU-V87 many moons ago since I recognized name; (never unsq'd or de-lbr'd 'cause never understood them).

After 30 minutes fiddling with the Osborne, **FOGHORN** in lap, and Hurst on the mind, I recovered all files of interest. Many, many thanks to you all!

As Doug says, backup early, backup often!

Ed Colloff
San Mateo CA

* * * * * * *

In Reply

In response to the comment by David Ibbetson in the May 1986 **FOGHORN** (page 14) regarding WordStar margins: although the default may be a design feature of the program. Ted Silveira's Flea Market article in the June issue of Profiles gives a patch to WSOVLY1.OVR which allows you to use margin defaults greater than the screen width.

Patch points for WordStar 3.3 are 1384h and the next two addresses. Current values should be 0A 88 76 (if they aren't; stop). Zero these three values and then save the file (SAVE 131 WSOVLY1.OVR). Now you can patch the right margin to greater than 76! For WordStar 3.0, patch beginning at the same address, but SAVE 133 WSOVLY1.OVR.

And in response to the article by Pat Mitsem in the June **FOGHORN**, (page 25), regarding changing the default line height in the program; it is necessary to also change the default values for the number of lines per page to reflect the fewer lines per page.

The alternative is to use .PL commands to set page length for each article or to use .PA to force a page break after each typed page.

I found that if you relied on the form feeds that normally occur, the pages start giving unequal top and bottom margins. Patches for this are 0352h for WS 3.3 and 0367h for WS 3.0. Also patches to 0353h in WS 3.3 and 0368h for WS 3.0 to express paper length in 1/48ths.

Michael Knoll
Vincennes IN

* * * * * * *

Novice Notes

The First Steps For Those Starting Out

Writing Tips

by Bruce T. Carroll

After all these issues, I finally believe I may be able to help other "Foggies". Barton Hickman mentioned in the December 1985 **FOGHORN** (page 16) that he uses NSWEEP (NSWP207 from the **FOG CP/M** Starter Disk) to delete his .BAK files on his WordStar disk.

Rather than booting another program, this procedure might be a little simpler.

Since you have logged onto the Drive B, where the TXT files are, when you have finished using WordStar, exit to the system using the X command from the *edit no file* menu. The prompt will be B> as you will still be logged to that drive.

Use the CP/M command DIR *.BAK↵. If you would like to delete all of the BAK files you see, then use the CP/M command ERA *.BAK↵. This will change the user number in the directory entry for each of those BAK files from 00 (or whatever user area you are in) to E5, meaning ERASED.

Next, Bernadine Paulshock (on page 17 of the same issue) asks for some help in changing a lower case word to upper case without deleting and retyping.

There may be two possible ways. First, find the word you want changed to upper case. ^V (control V) will toggle the insert command. If it is on, then whatever you type will be inserted into the document wherever the cursor is, pushing everything after it down. If the insert is not on, then whatever you type will replace whatever is at the cursor position.

So make sure the insert is not on (look at the top line of the screen, cursor position 55 and after will be empty – hit ^V and see what happens), and type over in upper case letters the words you want changed.

At least you will not have to delete the original word first or after you have made the correction.

The other possible way would be to use the ^QA command (find and replace). I like to ^QR (go to the beginning of the file) first, then invoke the ^QA command. WordStar will ask *FIND?* So answer with the lower case word you want changed. Then WS will ask, *REPLACE WITH?* Now type in the upper case replacement. Then WS will ask, *OPTIONS? (? FOR INFO).* You can answer G (global replacement) or N (replace without asking) if you wish.

Since you will be at the beginning of the file, B (search backwards) will not find the words and U (ignore case) isn't what you really want.

I hope these words of help prove to be as useful to these people as many of the ideas I have received from the **FOGHORN**. I have found many times that the simplest answer seems to avoid us time and time again, only to be so obvious once we really think about it.

I would like to thank everybody at the **FOGHORN** (and the **FOG** office) for putting out such a worthwhile journal. Keep up the good work.

* * * * * * *

WordStar Hints for Ver. 2.26

by G. Wilson

Equipment: Osborne 1 with factory DD and 80 column upgrades. Epson MX-80.

The Autostarts found in the **FOG** library are very helpful. MAKAUTO2.COM incorporates Fast and is to be used on MPI drives only. MAKAUTO.COM and STARTER.COM operate with all drives. MAKAUTO clears the screen to present a neat sign on. STARTER does not clear the screen, but it does provide for easy multiple installations.

Since CP/M system tracks include the function key option in setup during bootup, it makes sense to use this as your basic set of function keys.

Note that the function key ^KS cannot be put into FK.COM sets because the ^S is an eraser. Since ^KS^QP is a desirable key, it must be put in the setup group.

Place FK.COM on all of your disks. It contains eight sets of function keys and a quick way to access and change them. At a system prompt or WordStar menu R, type FK M to display current function key set. Any key can be changed at this time and it will remain effective until changed or the disk rebooted. If FK C is used, the change stays until changed again.

A quick way to look at the current function key set is to use another program found in our library called FUNCTDD.COM. It can be called into use at a prompt or from WordStar's R command in the edit no file menu. I renamed my copy of FUNCTDD to SEE on my work disk to help me remember its use.

I put CP/M system tracks on all of my disks. I consider FUNCTDD.COM, NSWEEP.COM, DIRR.COM, and FK.COM a must on my program disks. Data disks are efficient and easy to maintain if DIRR.COM and NSWEEP.COM are on them.

Notice that <ESC>0 (zero) ^PO↵DIRR↵^C will print the directory compressed at eight lines to the inch on an Epson MX-80 printer. Function key number 1 is set to that.

I remove all backup files with another function key set to ERA *.BAK↵. See below.

Boot data disk in Drive A. The data disks function keys are listed below. This is much quicker than booting the CP/M/Utilities disk to work from:

```
9 FK M↵
8 MAKAUTO2↵
7 ERA *.BAK↵
6 SETUP↵
5 NSWEEP B:↵
4 NSWEEP↵
3 3
2 <ESC>0(zero)^PO↵DIRR B:↵^C
1 <ESC>0(zero)^PO↵DIRR↵^C
0 DIRR↵^C
```

I try to maintain some type of order to the placement of my function key selection so as to get the most from the number pad.

It makes sense to me to place ^QR at number 7 and ^QC at zero on my WordStar envelope.

I prop the envelope in front of me for easy reference while the program is in use. ^KD has always been number 5.

It is a good idea to find the good position for use and then leave it unchanged if possible.

My WordStar setup function keys 3, 6, and 9 are set to R's of the edit no file menu:

R FK M↵, R NSWEEP↵, and R DIRR↵.

Yes, NSWEEP will work fine from such a situation! My information has come from many sources over time. Much of it is in the **FOG** library.

I will show here latest versions of the programs that I could have referred to, with the exception of NSWEEP. As I have limited disk space, I like the old (1.99) version of this program. (NSWEEP is on the **FOG** Starter Disk; MAKAUTO, MAKAUTO2, STARTER, and FUNCTDD are on FOG - CPM.142; FK is on FOG - CPM.021; and DIRR is on FOG - CPM.104).

Special Note: Because ^KS^QP is so useful in WordStar, it gets a whole paragraph here. I keep it on function key number 2.

Thanks to Doug First of our group, my WordStar automatically boots to Drive B. Doug gives credit to Mark Stein, John Mundt and Steve Kapplin of Chicago's First Osborne Group. I could not find the patch in our copy of CFOG library.

To have WordStar log to Drive B, use Install.COM to make the following changes in WS.COM. It is easier if Install is located on the WS disk.

Location	Old value	New value
0101	10	50
0102	2D	03
0350	00	0E
0351	00	0E
0352	00	1E
0353	00	01
0354	00	CD
0355	00	05
0356	00	00
0357	00	C3
0358	00	10
0359	00	2D

0 to stop and Y to install this into WS.COM.

Now be sure to put a data disk into Drive b during booting of WordStar.

Note: I used MAKAUTO2.COM to set SuperCalc to boot to DIRR of Drive B. After it boots that far, I then can decide if I need Dattim or whether to go right into SC2.

* * * * * * *

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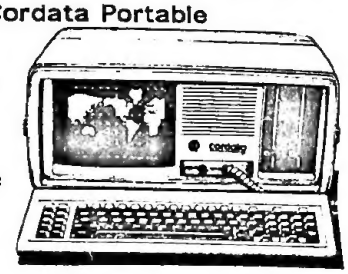

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Printing Bulk Envelopes

by John Woodford

[Here are a few tips from "Down Under". I am a member of the University of Queensland QUG and use an O-1 DD.]

A friend, Beresford Northcott runs a Mailbox Bible Club and sends out Sunday School lessons, in Australia and SE Asia. He uses a Systems Group 2001 computer with a 16 MB hard disk and has worked out a most cost-effective way to print out envelopes which might be useful to others.

While you can buy continuous envelopes, they cost at least AUST12c each. Many people print out to labels which are then stuck on envelopes and these labels cost about AUST4.5c each. Northcott buys standard photo corners (1) from the stationery supplier and sticks them on his 11"x11" form feed papers so that two 9"x4" envelopes will fit onto each page. The first envelope is mounted from lines 1-25 and the second from lines 31-56. He then prints out the addresses direct onto the envelopes using a program written for him by Prof. E. Sulzmann of the Queensland University.

There are 33,000 students doing the correspondence lessons and the group prints from 2-600 envelopes each day. Beresford says that the form feed papers have lasted for three years and the paper with envelopes inserted does not clog his printer. The form feed paper is used two to three times weekly.

Sometimes the joints at the page ends have to be strengthened after 12-18 months with Scotchlite magic tape. Ordinary sticky tape is counter-productive. There is one trap for the unwary. If the print head is allowed to move too far to the left it could catch the side of an envelope. However it is no trouble to set the head to prevent this malfunction.

The printer is an Anadex DP 9500. (2)

He cut a slot in a table to allow the paper to feed up from a box under the table. Volunteer helpers come in regularly to insert new envelopes into the slots created by the photo corners.

Now for the bottom line. Printing by this method costs nothing more than the labor of mounting the envelopes, the cost of each envelope and wear-and-tear on the printer. The envelopes are bought in bulk and work out at AUST2c each.

Footnotes

(1) Seldex Transparent Self-adhesive Photo Corners from Seldex Pty. Ltd, 117 Langridge St, Collingwood, Victoria Australia 3066.

(2) The Anadex 9500 was made by Anadex of 1001 Flynn Rd, Camarillo CA 93010, supplied by Chairman Systems, 39 Sherwood Rd, Toowong Queensland 4066 Australia. Speed is 120cps at 10 pitch and can be used with either serial or parallel ports. Character matrix 11x9. The ribbon system in this model is particularly trouble free.

Some Tricks with Wildcards

by Jim Holmes

In a recent issue of *ONKUG* Remy Autz of Arizona had a tip on recovering an ERAsed file when you can't recall the exact name: ". . . try something wild, like: A>UNERA A:*.*

You can use wildcards where you have to list a number of files, such as: A>PIP B:=A:*.COM to transfer only the .COM files from Drive A to B . . . or, as in the earlier example, to recover ALL files you had ERAsed from A.

Of course, you will often find you've UNERAsed a "bunch of junk," too.

Suppose I have ERAsed a file called 08/23WMG.LTR. I may recall some part of the filename extension, and can use it in the UNERA.COM "call" or argument. This is a good way to keep the "junk" you recover (along with the files you want) to a minimum.

In my 08/23WMG.LTR example, I could enter any of the following to get my file:

A>UNERA ?????WMG.*
A>UNERA 08/23*.*
A>UNERA *.LTR

The more exact my call, the fewer matches UNERA will find.

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WordStar's Find and Replace Can Make Life Much Easier

by Mark Bordsen

I like **FOGHORN**'s new emphasis for novices. Even though I have had my Osborne 1 since 1983, I find these articles give me neat tricks which make working on a computer even easier.

Now I have two questions.

First, sometimes I reformat with ^B and use the hyphen (-) to split words.

Then, in order to get everything on a page, I may extend the right margin.

Of course this moves all the hyphenated words around and I have hyphens where I don't need them. I thought I could find and clear them with ^QF but that doesn't even seem to find them.

So I am left with tedious proofing, or an end of line search before I reformat. Is there any way to have ^QF find these mid-word hyphens.

[The fact that you are unable to find your hyphens when you use ^QF means you are using "soft" hyphens instead of "hard" hyphens.

An example of a "hard" hyphen is in words like "co-operate", "mid-word", "IBM-PC", where you have typed the hyphen. Try ^QF with words like that. You will be able to find them.

Now, type ^O (help menu for onscreen commands for things like margins and tabs, centering text, setting line spacing and toggle commands) and have a look in the column headed More Toggles.

The:
H Hyph-help now and
Soft hyph now
probably are both set to on. With these "on", you are working with "soft" hyphens.

You don't have to worry about erasing them when you reformat and they no longer are at the end of lines because soft hyphens won't print even though you can see them on the screen.

In some WordStar versions, the toggle command ^OD (look at the ^O menu again) will "hide" or "show" you your soft hyphen display on the screen.

You are quite right, you can't "find" soft hyphens in the conventional WordStar way either, but in almost every case that isn't necessary anyway.

As an aside, there is a way to "find" soft hyphens but that depends on which version of WordStar you have and is not the sort of discussion we want to pursue here. Maybe someone with several different versions of WordStar would care to submit one? Joanne]

Second: I work in a planning office and am almost Pavlovian with regards to articles I see about mapping capabilities. None of these systems seem compatible with CP/M. Could someone explain to me why this is so? Can CP/M not handle the requirements or is it because software has not been written for it? *[To date, there has been no software of this type written for CP/M.]*

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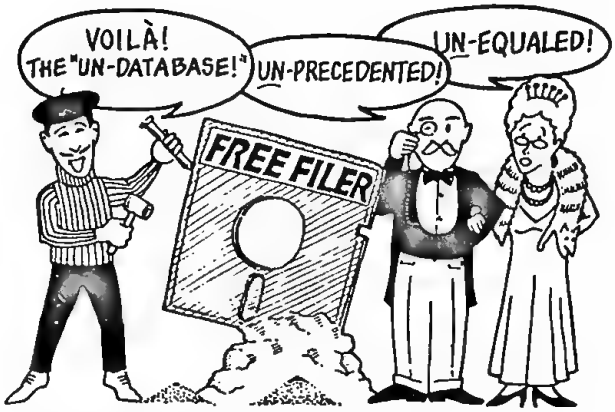

Database programs make you organize information into a form. That's fine for an address list where every entry contains the same old boring things. But how do you "database" your free-form text files, like novels, business letters, screenplays, annotated bibliographies, personal correspondence or client case histories? With a database program you're just plain out of luck!

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MORE ABOUT C P / M

CP/M HAS LOTS OF TRICKS UP ITS SLEEVES!

Getting Started With CP/M
Part 1

by Gale Rhoades

Learning CP/M can seem an impossible task. Fortunately, most users, having purchased their computers for specific tasks, need not learn more than a few basics. A major problem with writing a "comprehensive" introduction to CP/M is the fact that each computer manufacturer can add individual variations. Thus an example which is absolutely correct for one user can appear to be incorrect for another.

If I could teach a new computer owner two things, I would select:

Backup regularly

and

experiment freely!

As long as you are working with backup copies of your disks, you *cannot damage anything.* The most you can loose is the time you spent at the keyboard. All the books, manuals, classes, and tutoring in the world cannot teach as much as one devoted experimenter can learn in a single session!

These *Getting Started with CP/M* articles, to be written by as many authors as can be arranged, have the sole purpose of giving you the confidence to experiment. Like many of life's experiences, each endeavor relies on previous knowledge and provides a basis for future endeavors.

Unfortunately, we do not all own the same model of computer nor do we all have the same collection of experiences and ideas. Thus this first article must assume that you have done the following:

1. Unpacked the computer and connected the parts.
2. Followed the directions which came with your computer to create backup copies of your original disks.

You should not proceed with this article until those two items are completed. Your dealer should provide assistance with these steps. If they can't (or won't), a local user group or knowledgeable friend can usually provide assistance.

Getting Started

For this session, you should be sitting at your computer with the power on and copies of your system disks nearby.

You should plan on spending a couple hours reading this article. Each time an example is given, stop and try it on your computer. Make notes of the difference between what this articles says should happen and what actually does happen.

This will enable you to learn your particular version of CP/M. Do not proceed with the article until you are comfortable with the command or operation.

The first step is to insert your *boot disk* in your A drive and press the key marked RETURN or ENTER (note that written documents may use either the symbol <CR> or the symbol ↵ to represent these keys).

This operation is called *cold booting* – perhaps the originator of the term spent his winters in a snowy climate.

As a result of these keystrokes, your disk drive will begin working and information about who manufactured your computer will appear on the screen.

In a moment or two the *system prompt* will appear and the drive will stop. The system prompt is normally the letter A followed by the "greater than" symbol (A>). The system prompt indicates that the system is ready for work on the disk in Drive A.

Commands

Unless your computer uses a modified operating system, four programs are integrated into the operating system. These programs are called *intrinsic* or *resident commands.*

The intrinsic commands permit you:

* To determine what information is stored on disks in files (*DIR*)
* To erase unwanted files (*ERA*)
* To view the contents of some files (*TYPE*)
* To rename files (*REN*)

CP/M 2.2 systems have one additional resident command (*SAVE*) which can be used to write information from the computer's memory to a disk file. This command generally is not used by beginners and will not be discussed in this article.

All other programs (*transient commands*) are stored on disks as files. In order to reduce confusion, files must be categorized according to function or use. CP/M provides a mechanism for doing this.

Filenames

Files stored on disk are assigned names (a *filename*). The structure of these filenames has special meaning to both the system and the user.

Program filenames are made up of two parts. The first part may be from one to eight characters in length. The second part (the *filetype* or *extension*) is normally three characters long and tells the system that the file contains executable code. For example:

```
NSWP207.COM
   ^     ^
   |     |
   |     ----FILETYPE
   |
   ----FILENAME
```

Any program which can be operated from the system prompt MUST have the *.COM* extension. This extension tells the operating system that this transient program is "ready-to-run".

DIRectory

Regardless of whether the program is resident in the system or transient and on the disk, the same procedure is used to make the program work. You simply enter the program name (or filename) followed by a ↵. For example, to see what files are stored on your disk, just type DIR↵. On the screen will appear a list of the files stored on that disk.

A sidenote might now be appropriate. If you have a two drive system (CP/M does not operate well with only one drive), you may apply any command to the second drive by adding the drive name. For example, to see what files are on a second disk, insert the disk in the B drive and type DIR B:↵. The letter B followed by the colon is the *drive identifier* for the second drive.

If you wish to see what is on a third disk, you should remove the disk from drive B and insert this third disk into the drive. Unless you know you have a CPM+ or the CP/M 3.0 operating system, you must notify the system every time you change disks. Such notification is called a *warm boot* and is done by holding done the CONTROL key while pressing the C key. (Note that this control key may labeled CTRL and is often represented in text by either an arrow pointing upward or by the symbol ^.)

You may now issue the DIRectory command again. Don't forget to include the "space b colon" which identifies the drive.

Some DIRectory programs are written so that they format the display of the filenames. Thus each filename will be displayed as though it had eight characters. Some will display the period between the filename and the extension; some will not. Below are three examples of different DIRectory styles.

```
NSWP207 .COM    NSWP207  COM    NSWP207.COM
WS      .COM    WS       COM    WS.COM
SAMPLE  .TXT    SAMPLE   TXT    SAMPLE.TXT
CPMINTRO.DOC    CPMINTRO DOC    CPMINTRO.DOC
```

Each of these listings is correct. You need only remember that when using one of these filenames, you would enter it as it appears in the third column.

One little trick, to be discussed in greater detail in a later article, is the use of *wildcards* to replace actual file names.

But for now, we will only use a single wildcard, the asterisk (*). If you need to know which files are "ready- to-run" programs, try the command

DIR *.COM↵.

Only the first two filenames in the previous list will be displayed on your screen.

TYPE

Unlike the DIRectory program which simply reads the list of files stored on a disk, most programs must be used with another file. For example, the TYPE command permits you to read an *ASCII* text file.

ASCII files are printable, readable-by- humans files. They consist of letters, numbers, and symbols such as periods, commas, !, @, #, $, %, &, *, etc.

Files with a filetype of *.DOC* or *.TXT* are generally ASCII files.

For the purpose of demonstrating the use of the TYPE command, let us first assume that you have a file named SAMPLE.TXT on a disk which has been placed in Drive B. To read the contents of this file, you would enter

TYPE B:SAMPLE.TXT↵.

If you don't have a file called SAMPLE.TXT, use the DIRectory command to see what files are on your disk (type DIR *.TXT↵ or DIR *.DOC↵) and try TYPING one of the files listed.

If the file scrolls across your screen too quickly for you to read it, try holding down the CTRL key and pressing the S key once. ^S is the CP/M pause command. To restart the display, enter a ^Q or another ^S.

Repeat the ^S and ^Q as necessary until you have read the entire file. In some cases, the CP/M operating system will automatically pause every 23 lines. If your system does this, try pressing the space bar or the ↵ key to restart the display.

For those who have printers attached to their computer, the TYPE command may be used with the ^P to print the file to your printer. *^P* is the CP/M printer toggle. The first time you press it, you "turn the printer on"; the second time, you "turn the printer off".

Note that for this command to work you must first turn on the power for the printer and make sure it is *online*. Consult your printer manual for assistance if you are not sure about the online condition.

Thus, to print the same SAMPLE.TXT file the command would be:

type b:sample.txt^P↵

When the file is completely printed, just enter a second ^P.

Upper or Lower Case?

Incidently, did you notice that the last command line was in lower case characters? Unlike some programs which operate under the CP/M operating system, CP/M itself can translate lower case characters into upper case. There is not sufficient space in this article for a discussion of the difference between a and A, so we must proceed with the understanding that in some cases these letters are handled as different characters and in other cases, they are handled as if they are identical.

Suffice it to say that when you are entering something at a system prompt, you may do so in either upper or lower case.

RENname and ERAse

Only two intrinsic commands remain. RENname permits you to change the name of a file. For this command, like many others, remember "new=old".

For example, if you wanted to change the name of the file SAMPLE.TXT to SHOW.DOC, you would enter the command:

ren show.doc=sample.txt↵.

The most dangerous command of all is ERAse. If extreme caution is not used, you can delete the wrong file/s from your disk.

Using the command is easy:

1. Make sure you are working with a backup copy of your disk or that you really don't want the file anymore.
2. Type ERA SAMPLE.TXT
3. Check the spelling of the filename.
4. Type ↵

Recovering ERAsed Files

Sooner or later you will ERAse a file you need or didn't mean to erase.

Fortunately, other users have solved this problem. When you ERAse a file, the file is not really removed from the disk. Rather, a note is made in the directory area of the disk. This note tells the operating system that the disk space is available and that the operating system should use the space for the next file created.

Providing you *immediately* alter this note, you can *UNERAse* the file. You must not make any changes or additions to the disk before attempting to UNERAse the file.

For most CP/M users, the program RECVR21 (on the **FOG** Starter Disk) makes UNERAsing as easy as ERAsing the file (fortunately).

Play it safe – NOW. Get a copy of RECVR21 and test it. Be sure it will work on your system. While there are other ways to UNERAse files, this program is the easiest and quickest. In the event that RECVR21 will not work on your system, check out similar programs or become friends with a local "hacker" who knows how to use DU.

You should also add learning DU for disk recovery to your list of things to learn about computers. Murphy's Law of Computers says that you will only ERAse the file you need after hours of labor when you've been so rushed that you forgot to make time for backups and your entire career depends on delivering the file in 30 minutes!

As my Scout leader used to say, "Avoid Disaster, Be Prepared".

An Easier Way

Are you finding these commands a bit confusing or clumsy?

Well, another user (Dave Rand) thought that too so he wrote an easy-to-use solution. Called NSWP207 (and pronounced "NewSWeeP"), this program is also on the **FOG** Starter Disk.

In addition to showing you what files are on the disk (and how big they are), NSWP207 makes renaming, reading, printing, and erasing files both safer and easier. It also makes moving files between disks an easy job, compresses files so that they will need less disk space (*squeezing*), unsqueezes those squeezed files, marks files so that they cannot easily be erased, and much more.

A future article will focus on using NSWP207 (see Using the **FOG** Disk Library in the *Library News* section of this issue for a brief introduction). Get it now so that you are prepared! If you already have the program, experiment with it – use it to print out the documentation (NSWEEP.DOC).

The **FOG** Starter Disk may be obtained from your local user group or it may be ordered directly from the **FOG** office. See the *Member Merchandise* section for details.

* * * * * * *

Two More Uses for PIP

from K>BYTE

(the Kaypro Users' Group Newsletter)

A new member had a Perfect Writer file that was too large to fit into her Kaypro 1's memory, and would not come up when summoned. The problem was solved using a PIP trick that breaks the file into smaller segments that can be edited and then chained for printing.

Using the letter Q will tell PIP to quit copying, and the letter S will tell it to start. Here's how to do it:

* Use the CP/M resident command TYPE <FILENAME.EXT>, or the V option in NSWP207 to view the file that is too big.
* Find a string of words near the middle that is unique. Let's assume that your large file is named BIGFILE.MSS, and when you view the file you find the following unique string of words in the middle of the file: "Joe is a klutz".
* Put a disk with PIP and your file named BIGFILE.MSS in your Drive A.
* Type:

pip little.mss=BIGFILE.MSS[Q Joe is a Klutz:^z]↵

(The only spaces should be after PIP and in the unique string.) Note that this can be all on the same line as the "PIP". If your unique string of words is long, type a ↵ AFTER the PIP. You will get *. Now type the part Little.mss etc.

* You now have a new file LITTLE.MSS that consists of everything from the beginning of the file to "Joe is a klutz". Your original file is intact, and you've extracted the first half of the file for future work. Now you need to get the second half.
* Type:

PIP Little2.mss=BIGFILE.MSS[sKlutz:^Z]↵

You will now have a file "Little2.mss" which has the second half of your too big file. You can now work on the two files as you wish. Both files will have the word "KLUTZ" in them.

This routine will work on regular ASCII files (text), but probably not on other kinds. The routine can be a bit finicky and may have to be repeated.

Going the Other Way

Speaking of PIP, here is how you can merge two or more ASCII files. Let's say you have three small files SML1.TXT, SML2.TXT and SML3.TXT and you want to smush them into one file called BIG.TXT. With a disk with PIP on it in Drive A and your disk with the three small files on them in Drive B you should log to Drive B and type:

A:PIP↵
***a:big.txt=sml1.txt,sml2.txt,sml3.txt[ov]↵**

You now have a file on Drive A consisting of the three smaller ones.

* * * * * * *

LIBRARY NEWS

Using the FOG Disk Library

by Gale Rhoades

Many members, especially newer ones, find using the **FOG** Disk Library overwhelming. So often we hear: "All those disks – where should I start?" or "I need such and such a program – what disk is it on?".

It was so easy when I joined **FOG**. Jim Woolley had just started releasing disks and there was not much variety.

Now the library has about 150 disks in the CP/M section and thousands of programs. So this article is intended to help you get started.

Some Ground Rules

The first thing to know about the library is that it is divided into two sections. **FOG–CPM** is for members with CP/M computers; **FOG–DOS** is for members with MS-DOS or PC-DOS computers.

In many cases, similar programs exist in both sections but you can only use FOG-CPM disks on CP/M computers and FOG-DOS disks on MS-DOS systems.

When ordering disks from the **FOG** office, always specify the section from which you want disks.

Each disk has a name. This name takes the form *FOG-sec.nnn* where *sec* refers to the section (CPM or DOS) and *nnn* refers to the disk number. Each disk contains a *Disk Doc*. The name for this file takes the form *sec#nnn.DOC* (again, *sec* refers to the section and *nnn* refers to the disk number).

This Disk Doc will tell you what is on the disk. Each file is listed with its CRC value (we'll discuss that in another article) and a brief description.

Restrictions (such as "the programs on this disk will only work on Xyz computers") are always listed in this file.

Unless otherwise stated, all programs in the CP/M section should work on all CP/M computers.

First Selection

The first disk you should get is the Starter Disk. (Be sure to specify the CP/M version – see the **FOG** Member Merchandise section for information on ordering this disk from the **FOG** office or check with your local users group.)

Not properly a part of the library because it is updated as newer versions are released, this disk contains several utility programs which every user will need sometime in their computer career.

Perhaps the most important is NSWP207.

Have you every spent hours trying to transfer a file from one disk to another? Or created a backup disk only to discover that it was as damaged as the original? Or wanted to safely delete several unwanted files? For each of these operations, and many others, NSWP207 (called NewSWeeP) proves that computers can make your life easier. Most users shorten the name to NS.COM (using the program itself to do the renaming) and place it on every program disk.

Using NSWP207 is easy. Let's start by putting a copy of the Starter Disk in Drive B. At the system prompt (A>), type:

B:↵

Now B> will be the system prompt so enter:

NSWP207↵

On your screen will appear:

```
NSWEEP  -  Version 2.07     07/17/1986
       (c) Dave Rand, 1985, 1986
           Edmonton, Alberta

Drive B0:????????.??? 181K in 10 files. 2K free.

  1. B0: -STARTER.FOG          0K :
```

Now enter ?. A new screen will appear – you have just learned your first command.

```
NSWEEP  -  Version 2.07     07/17/1986
       (c) Dave Rand, 1985, 1986
           Edmonton, Alberta

A - Retag files       :  Q - Squeeze/Unsqueeze tagged files
B - Back one file     :  R - Rename file(s)
C - Copy file         :  S - Check remaining space
D - Delete file       :  T - Tag file for transfer
E - Erase T/U files   :  U - Untag file
F - Find file         :  V - View file
L - Log new disk/user :  W - Wildcard tag of files
M - Name file copy    :  Y - Set file status.
P - Print file        :  ? - Display this help
X - Exit to CP/M      :  cr, sp - Forward one file

  181K in   10 files.      2K free.
  Tagged files =    0K (   0K).

  1. B0: -STARTER.FOG    0K :
```

Whenever you are confused as to which command you should use, just enter a ? and check the list. Soon you will remember the ones you use frequently.

You will notice that your cursor is sitting beside a filename. Let's try a few commands (<sp> indicates that you should press the space bar and ↵ indicates that you should press the RETURN or ENTER key):

```
1. B0: -STARTER.FOG    0K : <sp>
2. B0: /STARTER.DOC    4K : <sp>   (here is the Disk Doc)
3. B0: DU-V87  .COM    8K : ↵
4. B0: DU-V87  .DOC    8K : ↵
5. B0: EDFILE  .COM   11K : B
4. B0: DU-V86  .DOC    8K : B
3. B0: DU-V86  .COM    8K : B
2. B0: /STARTER.DOC    4K : B
1. B0: -STARTER.FOG    0K : X
```

The last command exits NewSWeeP and returns you to the system prompt. Two commands which you should try immediately (load NSWP207 again) are View and Print.

The first one displays text files on the screen (23 lines at a time) and the second sends the file to your printer. Use the print option to print all of the files with the .DOC extension (or at least NSWEEP.DOC).

Second Selection

The next disks you need are the catalog disks. Check the **FOG** Member Merchandise section for the latest information. Currently there are two catalog disks – the first has the descriptions of the first 100 disks in the **FOG** library and the second has the balance of the disks.

All of the listings are grouped in lots of 25 disks. For example, the descriptions of the first 25 disks are contained in the file 001-025.TXT and the next set are in 026-050.TXT.

These files may be printed with most word processing programs but many users find it easier to use NewSWeeP.

Once the files are printed out, you should read through the listings. At a recent user group meeting, I noticed that one of the members had borrowed several of his kid's hiliters (special felt pens which is designed to allow you to read what you draw a line through). Everytime he saw a description of a program which sounded interesting, he marked it.

The marking system was very elaborate. He used different colors for different types of programs. All games were marked in pale yellow, WordStar utilities were in pale blue, dBASE II programs were in pink, and so on.

As a novice user, he was surprised to find himself the resident "library expert" for the night – his "knowledge" of which programs were for what was enjoyed by everyone because he had added notes about any of the programs he had actually used and was willing to share these notes.

I mention of this for two reasons. First is to share a trick about making the library less intimidating. But even more important is the reminder that every member has something to offer others. This member's about problems he had encountered started a discussion about what he was trying to do and resulted in several members demonstrating how they had solved similar challenges. It was a meeting which lasted far into the night (we had to move to an all night restaurant).

Final Suggestions

Start slowly. Get the one or two disks which really interest you. Learn these programs. Ignore the fact that there are thousands of programs in the library. Most programs are not for everyone. There are dozens of similar programs; use the one you feel comfortable with or which does the job the way you want it done.

Share your experiences with other users. No user can ever learn all of the programs written for CP/M computers. If each person learns to be proficient with three programs and shares that skill with nine others, soon 10 users will be proficient with 30 programs.

If you find "bugs" in a program, write up a report and submit it to the **FOGHORN**. Sometimes your problem will be caused by inaccurate or incomplete documentation; sometimes there really is a bug. If another user knows of a solution, you will benefit. If not, you may save someone lots of time and frustration.

Send donations to the author(s) of the "user-supported software" you actually use. This encourages the authors to upgrade the programs and others to write new applications. If you cannot discover the correct mailing address for an author, draft the check to the author and mail it in care of the **FOG** office. We will forward it.

FOG Starter Disk

I am including here a brief description of the programs which are currently included on the **FOG** Starter Disk.

```
DU-V87   .COM: This program enables disk recovery and
                modification.  Experiment on a disk that does
                not matter to you before trying to restore a
                valuable disk.
DU-V87   .DOC: Squeezed documentation for DU-V87.
EDFILE   .COM: This program allows editing of ANY file, either in
                HEX or ASCII.  It's good for quick patches to
                nearly any program.
EDFILE   .DOC: Documentation for EDFILE.
FBAD57   .COM: This program maps out bad sectors on a disk under
                CP/M 2.2 operating system.
FBAD57   .DOC: Documentation for FBAD57.
FBAD58X .COM: This program maps out bad sectors on a disk under
                CP/M 3.0 operating system.
FBAD58X .DOC: Documentation for FBAD58X.
NSWP207 .COM: A universal file manipulator.  ESSENTIAL for disk
                and file management.
NSWEEP   .DOC: Documentation for NSWP207.
NULU11   .COM: Similiar to NSWEEP in the way it works, this
                program allows creation of, extraction from,
                etc. all .LBR files.
NULU11   .DOC: Documentation for NULU11.
RECVR21 .COM: This program is a menu-driven utility to restore
                erased files under CP/M 2.2 operating system.
RECVR21X.COM: This program is a menu-driven utility to restore
                erased files under CP/M 3.0 operating system
                (will NOT work on the C-128).
RECVR21 .DOC: Documentation for RECVR21 and RECVR21X.
```

* * * * * * *

New Disk Releases

by Jack Brown

There are now 150 disks in the **CPM** section of the **FOG** Disk Library. We will continue to describe the disks in this section as space is available. If you would like to get descriptions sooner, get the Catalog disks (get them from your local A.M.O. group or order from the **FOG** office – see *Member Merchandise* section for details).

Those groups which took advantage of the one-time disk exchange should have a complete set of these disks by the end of October. *(Special kudos to the members, both local and remote, who have helped us get all these disks copied!)* The disks are also being mailed to any of the SysOps who asked to be on the round robin update.

```
Filename          Description
-FOG/CPM.080:  Wordstar/Mailmerge utilities and filter programs
//CPM080.DOC:
/JUN/86 .    :
A        .    :  "The Letter" automated correspondence mgmt file
ADDBACK .SUB:  "The Letter" automated correspondence mgmt file
DATABASE.    :  Use with MailMerge to enter info into a database
DATABASE.INF:   file for use with other MM programs
DEFAULTS.SUB:  See WSSUBMIT.DOC. For Epson & WS 2.26
DIABLO  .BAS:  Use this file to set your Diablo 630 margins so
DIABLO  .COM:   that you can get nice proportional spacing with
                  WordStar
DIABLO  .DIR:  A list of Diablo control keys and special codes
                  when
DIABLO  .DOC:   patched.
DIABLO  .PRN:  A sample file ready to print with your Diablo 630
ENSOFT2 .C   :  C80 source code for ENSOFT2
ENSOFT2 .COM:  Will take a standard ASCII text file and change
ENSOFT2 .DOC:   'hard' spaces and carriage returns to 'soft' W/S
                  format
ENVELOPE.MRG:  Sample MM file for printing envelopes
F        .    :  "The Letter" automated correspondence mgmt file
L        .    :  "The Letter" automated correspondence mgmt file
LARGE   .COP:  "The Letter" automated correspondence mgmt file
LETT    .DIR:  "The Letter" automated correspondence mgmt file
LETTBACK.SUB:  "The Letter" automated correspondence mgmt file
MAKEWS  .COM:  Converts 'hard' ASCII text files to 'soft' format
MAKEWS  .DOC:   Wordstar files.
MAKEWS  .Z80:  Z80MR source file for MAKEWS
MESSAGE1.SUB:  See WSSUBMIT.DOC. For Epson & WS 2.26
MESSAGE2.SUB:  See WSSUBMIT.DOC. For Epson & WS 2.26
MORPAT  .ASM:  Wordstar 2.2x patch file for super/subscripts.
MORPAT  .HEX:   You must be familiar with SID and CP/M
MORPAT  .PRN:   assembler to use this file!
MORPAT  .REL:
MORPAT  .SYM:
OS1OWN01.A83:  "The Letter" automated correspondence mgmt file
PAGE    .BAS:  Sets the page length for the Diablo 630 printer
PAGE    .COM:  Compiled version of PAGE.BAS for Diablo 630
PAIR    .COM:  Finds unpaired control characters in WS files
PAIR    .DOC:
PALC-SIG.COP:  "The Letter" automated correspondence mgmt file
PRINT   .SUB:  See WSSUBMIT.DOC. For Epson & WS 2.26
PRINTME .1ST:  "The Letter" documentation.  Makes MailMerge an
SAMP-SIG.COP:   automatic letter generator to create, print, and
SMALL   .COP:   store your correspondence.
UNSOFT  .COM:  Converts WS files to standard ASCII, removes dot
UNSOFT  .DOC:   commands, makes soft hyphens hard
W2      .MRG:  Sample MM file prints W2 forms
WSPATCH3.ASM:  Provides memory mapped video and print spooling
WSPATCH3.DOC:   for use with WS 2.26  Special code for F1040
                  printer also
WSSUBMIT.DOC:  'Semi-automatic' patching of WS 2.26 using .SUB
                  files
Y-FORMAL.COP:  "The Letter" automated correspondence mgmt file
```

```
-FOG/CPM.081:  The STOCKBASE program in CBASIC
//CPM081.DOC:
/JUN/86 .   :
CSTKBASE.LTR:  This disk contains the STOCKBASE program as
DAYHST  .DAT:   described in the FOGHORN and the PORTABLE
                  COMPANION
JULDATE%.BAS:
LINREG  .BAS:  It can be used to track the performance of a
PORTPRFM.BAS:   stock portfolio.
QKSORT$ .BAS:
QKSORT% .BAS:  You will require CBASIC (CRUN2 and CBAS2) to use
SCRNIN  .BAS:   this program.
SCRNIN2 .BAS:
SCRNIN3 .BAS:  Additional files are on FOG/CPM.082.
STKBASE .INT:
STKBASE2.INT:
STKBASE3.INT:
STKFIL01.DAT:
STKFPRNT.BAS:
STKGRAP2.INT:
STKGRAP3.INT:
STKGRAPH.BAS:
STKGRAPH.INT:
STKHIST .BAS:
STKPLOT .BAS:
STKPRIC2.INT:
STKPRIC3.INT:
STKPRICE.BAS:
STKPRICE.DAT:
STKPRICE.INT:
STKUPDTE.BAS:
STOKBASE.DOC:
STOKBASE.TXT:


-FOG/CPM.082:  Financial programs
//CPM082.DOC:
/JUN/86 .   :
BUDGET  .BAS:  Recursive budgeting model
COMNSN  .BAS:  Compare Merrill Lynch and Charles Schwab
COMNSN  .DOC:   commissions for common stock transactions
FINANCE .BAS:  Calculates loans, deposits and compound interest
FINANGN1.BAS:  Calculates I, N, PMT, PV, FV.
FINANGN1.COM:  Double precision compiled version of FINANGN1
LOAN    .BAS:  Loan amortization program
PROJECT .BAS:  Project cost calculator (costs board feet)
RATIOS  .BAS:  Calculates ratios from balance sheet information
RATIOS  .DOC:
STATS1  .BAS:  Calculates mean, variance, and standard deviation
STCKEXMP.BAS:  With STOCKS.BAS, manages a stock portfolio
STKADD  .BAS:  -
STKBASE .BAS:  -
STKBETA .BAS:  - CBASIC files for STOCKBASE on FOG/CPM.081
STKCHANG.BAS:  -
STKCREAT.BAS:  -
STKGRPH .BAS:  MBasic program that creates a graph of a stock's
STKGRPH .DOC:   20 week price history & 30 week moving average
STKPRFM .BAS:  -
STKTRANS.BAS:  - CBASIC files for STOCKBASE on FOG/CPM.081
STKUPDAT.BAS:  -
STOCGRPH.BAS:  MBASIC program that graphs weekly stock prices
STOCGRPH.DOC:   and displays a table or plots on printer
STOCK   .DAT:
STOCKFL .   :  Empty file for STOCKS initialization
STOCKS  .BAS:  With STCKEXMP, manages a stock portfolio


-FOG/CPM.083:  MBASIC programs
//CPM083.DOC:
/JUN/86 .   :
BASLIST .BAS:  BASIC program lister lists file to screen in
BASLIST .COM:   'pretty' format
BASLIST2.BAS:  BASIC program lister with optional parameters that
BASLIST2.COM:   can specify number of characters per line, output
BASLIST2.DOC:   to screen, printer or disk, etc.
CALC-DM .BAS:  Part of DESK-DM.BAS
DDISK-DM.BAS:  Part of DESK-DM.BAS
DESK-DM .BAS:  Desk Manager program. Calculator, memo writer,
DESK-DM .DOC:   rolodex, and more!
DUCK    .BAS:  Shoot'em game for Osborne 1, but can be modified.
GRADES  .BAS:  Class grades maintenenace program & class listing
IDENT-DM.   :  Part of DESK-DM.BAS
INDEX   .   :  Part of TELEPHON
INIT-DM .BAS:  Part of DESK-DM.BAS
MAKEMENU.DOC:  Menu shell program for memory mapped computers
MAKEMN8B.BAS:   This version is somewhat generic.
MAKEMNZ2.BAS:   This version is configured for the Zorba
REPEAT  .BAS:  Displays a sequence of number you have to repeat
                 to win
ROLO    .   :  Part of TELEPHON
TELEPHON.BAS:  Maintain a telephone list
TYPEFAST.BAS:  A touch typing drill
TYPING  .BAS:  Another typing drill


-FOG/CPM.084:  Disk Catalog program & text catalog program
//CPM084.DOC:
/JUN/86 .   :
FATCAT  .COM:  Menu driven catalog program that reads disk
FATCAT2 .CHN:   contents without sorting, leaving that task for
FATCAT3 .000:   later selection.  This makes it fast and easy to
FATCAT3 .001:   catalog all your disks at a sitting.  Works with
FATCAT3 .002:   hard disk user areas and/or floppies.
FATCAT3 .003:
FATCAT3 .004:   Full documentation is on FOG/CPM.085
FATCAT3 .005:
FATCAT3 .006:   For Z80 CP/M 2.2, CPM+, ZCPR3 systems.
FATCAT3 .CHN:
FATCATIN.COM:
FATCATIN.DTA:
FATCATIN.MSG:
OUTCAT  .000:
OUTCAT  .COM:
README  .1ST:
STANDARD.CFG:
TXTL    .COM:  Sets up text information in a file for easy menu
TXTL    .DOC:   driven access
TXTL    .MAC:  Z80 source code for TEXTL
VOLNUM  .COM:  Maintains a sequenced list of disk numbers for use
VOLNUM  .DOC:   with FATCAT
Z3INSTP .COM:


-FOG/CPM.085:  Disk catalog programs
//CPM085.DOC:
/JUN/86 .   :
ABC     .BAS:  MBASIC catalog program. Requires DISK.DIR file
ABC     .DOC:   on each disk first (use XDIR.COM)
ADD     .CMD:  Part of DMASTER catalog program
APPENDIX.A  :  FATCAT23 documentation
APPENDIX.B  :  FATCAT23 documentation
CATALOG .DAT:
COMM    .CMD:  Part of DMASTER catalog program
DCAT10  .COM:  Lists MAST.CAT files grouped in disk order
DCAT10  .DOC:   Currently set for 79 disks maximum
DCAT10  .PQS:  Turbo Pascal source for DCAT10
DELET   .CMD:  Part of DMASTER catalog program
DISC    .CMD:  Part of DMASTER catalog program
DISC    .NDX:  Part of DMASTER catalog program
DMASTER .CMD:  Menu driven disk catalog prog. Requires dBase II
DMASTER .DOC:   Program names must be manually entered into file
EDET    .CMD:  Part of DMASTER catalog program
EXT     .NDX:  Part of DMASTER catalog program
FATCAT  .MMG:  MailMerge file to print FATCAT23 documentation
FATCAT  .TOC:  FATCAT23 documentation
FATCAT  .WS :  FATCAT23 documentation
FILE    .DBF:  Part of DMASTER catalog program
FINAME  .NDX:  Part of DMASTER catalog program
MSCREEN1.FMT:  Part of DMASTER catalog program
P1      .CMD:  Part of DMASTER catalog program
P1      .FRM:  Part of DMASTER catalog program
P11     .CMD:  Part of DMASTER catalog program
P111    .CMD:  Part of DMASTER catalog program
P2      .CMD:  Part of DMASTER catalog program
P2      .FRM:  Part of DMASTER catalog program
P3      .CMD:  Part of DMASTER catalog program
P3      .FRM:  Part of DMASTER catalog program
P4      .CMD:  Part of DMASTER catalog program
PART    .CMD:  Part of DMASTER catalog program
PRINT   .CMD:  Part of DMASTER catalog program
README  .1ST:  Read before setting up FATCAT
UPDAT   .CMD:  Part of DMASTER catalog program
VERS23  .UPD:  New information on FATCAT23
VIEW    .CMD:  Part of DMASTER catalog program
```

Continued on page 34

The Source for CP/M-80

Turn the page for more!

We're glad we decided to stick with CP/M users. *Thoughtline*, the only outline processor that works in both CP/M-80 and MS-DOS receives hundreds of glowing letters and rave reviews. And Peter McWilliams, writing in his nationally syndicated column, pays us the ultimate compliment, calling us "The Sears of CP/M software" and describing our catalog as "thick and delicious!" Please write or call for a copy; We'll continue to stick with you. Meanwhile, here's a peek at our latest goodies:

Thoughtline - it's your software

We have received literally hundreds of letters raving about the ease of use, familiar WordStar-like syntax, and powerful features of *Thoughtline*. Well, we have just released Version 2.1 and now—with the ability to read and write WordStar/NewWord files without losing the outline structure—this great program is even better. (Even more improvements are in the works, but you can buy with confidence now, because two upgrades are free!) It boils down to this: If you use your computer to write with, and you don't already own *Thoughtline*, get it. If you don't absolutely love it, we'll take it back. Simple as that.

What is He Talking About ?

Sorry - we forgot there are folks who don't know what *Thoughtline* is. *Thoughtline* is an outline processor—a way of putting your ideas quickly onto your computer, then organizing them and expanding them—even creating the finished article, computer program, book, term paper or complex project.

```
+1Things to Do
 +prepare for board meeting
  -get budget figures ready
  +Profit/Loss figures look good
    -Lead off with this
 +Pick up flowers for Jennifer
  -she likes roses
 +Tell people about thoughtline
  +Richard Elms
    -an attorney would love this
  +Betsy
    -great for her screenplay
 +November Calendar
  -17
  +18
    -dentist appointment @9:30
    +Lunch w/Fred
      -bring hawaii brochures
  -20
```

Thoughtline is more than just a way to create an outline. Working from your outline is simple - just continue typing on a topic and *Thoughtline* switches into a word processor - expand ideas to your hearts content. To return to the outline form touch ^UD and your paragraphs tuck back into the topic heading.

Sure Looks Familiar

Thoughtline even looks like WordStar. That's our way of saying if you know WordStar you know *Thoughtline* too. The cursor diamond works just like you would expect, as do most of the other editing keys. In fact, when you are editing free text, it's just like you were working with WordStar. (Except *Thoughtline* is a little bit faster.)

You're Still the Boss

Don't like outlines? No problem. Type a list of things you want to organize. Name the "boxes" you need to toss similar things like errands, office work, etc - and number each box using the binsort feature. Tag your list - that's a one, that's a four, etc. Your random list is sorted to the categories you've created. You'd rather prioritize? No problem, built right in.

Structured Text Importing

This hot new feature allows any WordStar or ASCII file to be imported right into outline format. You will be able to move between *Thoughtline* and WordStar without losing a beat (or a thought!) We know you'll love *Thoughtline*. Order today. Our 90 day guarantee lets you experience this indispensible tool without risk.

Thoughtline - $69.95

What our Users Say about Thoughtline:

Thoughtline is, without doubt, the best new CP/M program in years. - *Robert Sawyer, Freelance writer*

..by the way, Thoughtline is just right - excellent balance in design - *Dick Runke, United Virginia Bank*

I am writing about your great program Thoughtline. I only wish I had had this forty years ago. My writing would have been better and I would have done more of it. I wrote church school articles for 25 years, scores of articles and a dozen books, but with this I could have done better - *Kenneth Jones, Academic Dean, Mid-America Bible College.*

Hands down the most useful, powerful, fun to use and flashy piece of software I've encountered ... I caught on to it within half an hour of busting the wrapper and went straight to heaven - *Paul Estrem*

To the basic software I use frequently (WordStar, Supercalc II) I now add without reservation Thoughtline, as being equally useful and equally significant - *Fred Schultze*

...and as for Thoughtline - WOW! I bought KAMAS and waded through Adam Trent's obtuse mental gyrations until I was literally dizzy ...I sent for KAMA's little brother OutThink. Again, another great disappointment ...then comes Thoughtline. Now I can outline my books and articles just as I had hoped to when I bought KAMAS and later OutThink - *Dr. Eric Skousen, Writer*

Presto - you asked for it

Presto is the answer to a great many of our customers requests. So many of you said you wanted SideKick for CP/M machines.

Presto hides in memory while you run other programs. With a press of the activation key you can have a calculator, notepad or calendar. The calendar even has an alarm feature on computers with real time clocks. Your computer beeps and displays a message on the appointed day and time.

Presto - $39.95

Twist and Shout - By popular request

Print Sideways! This software lets your dot matrix printer print huge spreadsheets or text without cutting and pasting. As a bonus, Twist and Shout prints banners with eight inch letters in two fonts. Virtually all computers & printers supported.

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Make Your PC CP/M-80 Compatible

Acceler8/16 installs in IBM-PCs or compatibles and lets you run nearly all your CP/M-80 software on them. The V-20 chip included also speeds up your PC by about 15 percent in the MS-DOS mode. CP/M-80 emulation is equivalent to a 3.5 Mhz CP/M machine, similar to the machine you presently use.

Acceler8/16 also includes Media Master Plus which allows your PC to read and write to a variety of CP/M-80 disk formats. The terminal emulator duplicates Osborne, Kaypro and H/Z89. A bargain and an amazing product.

Acceler8/16 - $99.95

503-245-8102 - *Spite Software*

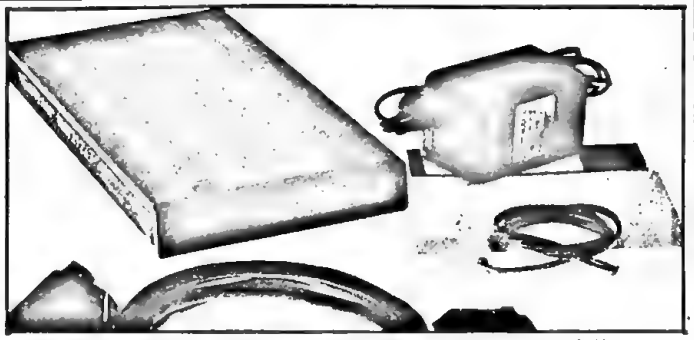
Great Modem Deal

Modems for Everybody

We want all our customers to have modems, because soon you're going to need one. There is a multitude of electronic services accessible via modem, and more are coming on-line all the time. We operate an bulletin board customers can access at any time for no charge. FOG operates a nationwide network free to members. And that's just the beginning.

They're Like Bellybuttons
When we first began selling our Turbolink 1200 modem it was a breakthough - the first high quality 1200 baud modem under $300. We added top-notch telcom software and a quality cable and sold it for $279.95 - a great deal. Now modems under $200 are as common as bellybuttons.

We've tested a number of them. Some of them were (as you might expect) good only as doorstops. Others lacked features or Hayes compatibility. But we could see the writing on the wall.



Note the high-quality metal case construction - full complement of LED's - completely compatible with Hayes.

So, we went back to manufacturers we knew built good modems and renegotiated—hard. Finally, we reached agreement. But to get the price we wanted, while keeping the quality we always had, we had to promise to purchase enormous quantities. That means we must sell these modems at rock bottom prices to move them.

Our new *TURBOLINK 1200* is just **$179.95!** For that price you get a completely Hayes compatible modem with speaker and a full complement of indicator LEDs, a 12 month warranty, telephone connector cable and power supply.

Instant Use
Don't buy it that way, though. For only $20.00 more, you get our Instant Use package which includes a high quality shielded cable to connect the modem to your computer, excellent telecommunications software (The Microlink II - a $99.00 value), access to our bulletin board, $25 free time on BRS/BRKTHRU the online information service, 30 days free use of the Official Airlines Guide discount flight booking system, and of course, the Turbolink 1200 modem. This whole package is just **$199.95!** No one can beat it!

At $20 additional for cable, software and access packages you've probably guessed we are not making anything on the package deal. But there's a reason for it. Telecommunications is complex. Lots of things can go wrong if you don't have a well mated setup. With our package success is virtually guaranteed.

Turbolink 1200 - $179.95
Instant Use Pak - $199.95

Biz-Letters

I hate writing letters. They are time consuming and they can be a terrible embarrassment. Many times I have reread my copy of a letter after it was mailed and found unclear phrasing, grammatical errors and clumsy construction. I don't want people thinking I'm an illiterate boob. Biz-Letters solves the problem.

This is a collection of over 100 professionally crafted, carefully proofed letters on disk. They include request and inquiry replies, reminders, goodwill notes, dunns, congratulations - the whole gamut of business correspondence. A quick reference in the documentation helps select the proper letter.

Use the letters alone or with a mailmerge data file. Used alone you enter the appropriate data from the keyboard. It is automatically entered into the proper spot in the letter as it prints.

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MS-DOS anyone?

If you are considering an MS-DOS computer, but the daunting prospect of buying all new software and relearning has you down **We have the answer.** Our PC-XT compatible Clones come equipped with 640k, AT style keyboard, Monitor card, and the drive configuration you want. We also have an AT clone. The big difference is that our XT compatibles come with the Hitachi V-20 chip installed and Acceler8/16 bundled in - which means your new PC XT compatible will run CP/M-80 software, and run it fifty percent faster than in your present machine. Your new clone will also read and write to your CP/M-80 disks thanks to Media Master + included free.

Furthermore, **our clones come with bundled MS-DOS Software.** The delay time associated with advertising dictates that we get this ad out while we are still negotiating with software distributors. We are not certain if all the folks we are talking to will participate. But we know for sure we will include MS-DOS versions of *Thoughtline*, Writer's Aide, a note card style database program, and a special version of SweepOP - our memory resident NewSweep work-alike. There will be other software as well, and it will be software you are familiar with.
With our package you can build onto the base of useful software skills you already have, and add new MS-DOS software capabilities - without having to relearn everything.

These machines are extensively tested and come with a one year warranty with service stations across the country.

Prices vary with the configuration you choose and market variations. Call us for the best deal.

503-245-8102 - Spite Software

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Writer's Aide - 7 Essential Writing Utilities For WordStar or NewWord - run from menu or alone.
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Compares citations in your text to your master file and automatically creates a bibliography. Combine with NOTEBOOK for a powerful reference system. **$59.95**

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We have been using Spell a long time. It's quick and simple and it will fit on a SSDD disk with WordStar or NewWord. Four times faster than competing checkers. **$49.95**

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SOFTWARE REVIEWS

Thoughtline, an Outline Processor From Spite Software

by Alan Chattaway

The following article is a review of Spite Software's outline processor, Thoughtline. I used the program itself to write the review, and this has resulted in a very definite structure (using indents) to the document.

1 Thoughtline Review by Spite Software: April 1986.
2 What Thoughtline is.
2.1 An Outline Processor . . .

Thoughtline is an outline processor. It is marketed (by mail) by Spite Software. I received version 2.0 for beta testing and review, and around the time I first finished this review, version 2.1 came out, sending me back to revise my review. Spite promises newer and better versions are coming, with free upgrades to buyers of early versions.

2.2 . . . and a WordStar Clone (?)

Thoughtline is not the only outline processor. Under CP/M there was already the powerful but difficult KAMAS, and its less expensive derivative OUT-THINK. For other operating systems there are similar programs such as Ready! and Think Tank.

However, what makes Thoughtline different is that the author intended right from the start to emulate WordStar wherever possible. The documentation bubbles with enthusiasm for this concept, with quotes from users like "I couldn't believe that something could replace WordStar for daily use, but that's what Thoughtline did".

Another advantage of the program is that it is available for both MS-DOS and CP/M, with complete data file compatibility. Since many *FOGHORN* readers own computers of both kinds, this will shorten their learning curve. Spite has stated that because MS-DOS has provided more memory space for programs to work in, future MS-DOS versions of Thoughtline may have additional features not found in the CP/M versions, but those commands common to both versions will remain compatible, as will the data files.

3 How Outline Processing works.
3.1 A practical example.

If outline processing is new to you. read on! This review using Thoughtline is a good example of a document with an outline. It's divided into topics, and under these there are sub-topics, then sub-sub-topics and so on. The outline of the review has a hierarchical or tree-like structure, and might look something like this:

1 Review of Thoughtline by Spite Software – April 1986
2 What Thoughtline is
2.1 An Outline Processor . . .
2.2 . . . and a WordStar Clone (?)
3 How Outline Processing works
3.1 A practical example
3.1 How you begin . . .
. . . etc.

3.2 How you begin ...

To begin making a document like this in Thoughtline, you type the outline almost exactly as it looks above. You don't, however, number the topic headings – Thoughtline will do this for you later. What you actually type looks like this:

Review of Thoughtline by Spite Software – April 1986
What Thoughtline is
An Outline Processor . . .
. . . and a WordStar Clone (?) How Outline Processing works
A practical example
. . . etc.

You use the TAB key to indent the topics, one press for each level you want to go "down" the hierarchy. You can "pull back" any topic you've indented too far by pressing the ESC key. Thoughtline will "mark" the start of each topic with a – sign if there are no sub-topics under it, and with a + sign if there are:

-Review of Thoughtline by Spite Software – April 1986
+What Thoughtline is
-An Outline Processor ...
-. . . and a WordStar Clone (?)
. . . etc.

Thoughtline also marks the "current" line with a > character at the left end. The cursor (shown as an underline) will be somewhere on that line:

-Review of Thoughtline by Spite Software – April 1986
>+What_Thoughtline is
-An Outline Processor . . .
. . .etc.

And there you have the whole outline as you would see it in Thoughtline.

3.3 Entering Text Under Topic Headings

Now that you have at started an outline, you are allowed to enter text under any topic heading by typing ^UD to open a paragraph. The screen below the current topic heading goes blank, and you can type in any reasonable amount of text – there is a limit determined by the amount of memory in your computer, but since most topics won't run beyond a page or two, you're not likely to run out of space even under CP/M-80!

As you type, there is an automatic word-wrap as you reach the end of each line, but Thoughtline makes no attempt at justifying the right margin.

Having typed a paragraph (or several) under the topic heading, you close it again with the same command that opened it, ^UD (analogous to ^KD in WordStar).

After closing your paragraph, you see your outline as before, except that the flag Thoughtline placed at the beginning of the topic heading has changed from - to = (or from + to #), which indicates that more text is present than meets the eye:

-Review of Thoughtline by Spite Software - April 1986
>#What Thoughtline is
-An Outline Processor . . .
. . . etc.

Note that if you don't want a topic heading over the paragraph, it's not even necessary to type ^UD to open it. Simply start typing the paragraph right into the outline, instead of typing a topic heading.

As you reach the end of the line and wrap to the next, a paragraph will be opened automatically. You must still close this paragraph in the usual way (^UD) when finished.

3.4 Reorganizing the Outline.

Once the outline is created, you can move any topic or adjacent group of topics, by using block commands modeled on those in WordStar. As you move the topic headings, the text "under" them also moves. Thus, you can reorganize the whole document just by rearranging the topic headings.

Thoughtline also has commands for hiding things: ^UH to hide the currently marked block, ^UN# (where # is a number) to hide all topics indented by more than that many levels. When topics are hidden, they are considered to be part of the next highest level still visible. If it is moved, they will go with it.

On the other hand, if they are visible on the screen, they are considered independent and will not move unless explicitly included in the marked block that gets moved.

If it helps you visualize this process, I suggest you think of hidden topics as unborn children which have no choice but to go where their mother goes. This is not a bad analogy, since there can be many more "children" than "mothers", and each "child" can have many "children" of its own. The only thing different about Thoughtline topics is that you can expand and collapse the view of the various "generations" at will, and make any revisions you care to make.

3.5 There's More . . .

You can rearrange any group of sub-topics under the same topic by using the "prioritize" command. The results are the same as if you had moved them with block move commands, but you get there faster and with less mental effort.

To prioritize a group of topics, you mark them as a block, then type ^UP next to each one in turn, starting with the one you want to be on top. This shifts the topic to the top and simultaneously moves it outside the marked block. Easy and effective!

3.6 Cloning

Thoughtline has another useful new feature called "cloning". One topic may be defined as a "clone" of another, and a single topic may have as many "clones" as desired. If the topic is edited in ANY of the places where it appears, those changes appear in ALL the other places as well.

What use is cloning? It lets you organize the same information in different ways at different places in the same file, e.g., you might organize a calendar of events in at least three ways:

A) prioritized by importance,
B) sorted by date and time, and
C) grouped by related purpose.

If the data in each of these places is a clone of the same data in the other two places, they will always agree, no matter which of them you open up to make changes.

In large documents which repeat the same block of text in different sections, this feature is very useful as it allows editing of the repeated blocks with absolute assurance that ALL copies of the block have been affected in the same way.

3.7 Speed

Thoughtline's speed is excellent. For many operations it seems faster than WordStar - certainly the cursor moves around the screen a lot faster. On my Osborne 1 (which has no keyboard buffer though most computers do) I was able on rare occasions to type fast enough to make Thoughtline lose a character, but then, I'm a fast typist (I didn't say a GOOD typist!).

3.8 Bin Sorting

Bin sorting is another special Thoughtline feature. After typing in a lot of topics, you may decide they need reorganizing. You can pick up to 10 topics to act as "bins" and number them by placing the cursor on them and typing ^K# where # is a number from 0 to 9. The bin numbers will appear at the left end of their topic headings, but cannot be removed by editing.

Now simply place the cursor on any topic, type ^U# where # is the desired "bin number" and that topic vanishes. It has moved, and is now the last sub-topic under the topic which has that "bin number". A very effective tool!

3.9 Printing

Thoughtline offers a wide range of print-time options. You can print to your printer, or into a disk file, you can print the paragraph contents or just the topic headings, you can have sub-topics indented or not, you can let Thoughtline number the topics and sub-topics using the familiar decimal system.

If outputting to a disk file, you can choose straight ASCII files or WordStar <D>ocument-mode files, so that you can use WS to put a final "polish" on the document before printing. This is important, since Thoughtline does not offer boldface, underscore, justification, etc.

All these options make it very versatile. Because there are so many more options than in WordStar, it takes you longer to answer all the questions before printing, and you can't avoid the remaining questions by pressing ESC, as you can in WordStar.

There are actually two ways to output into a WordStar file. If you choose to have Thoughtline number the topics and subtopics as it outputs to disk, the output file will contain no "comments". If, however, you choose not to have Thoughtline number the topics, you will later be asked whether you want to preserve the structure of the file. If you answer "No", you will get a normal WordStar document file.

But if you answer "Yes", Thoughtline will include in the WordStar file comment lines (of the usual WordStar form; i.e., lines beginning with two dots at the left side) containing information which WordStar will totally ignore – but from which Thoughtline can reconstruct the structure of the outline if this file is ever re-imported back into WordStar. This facility even lets you import into Thoughtline whole files which were already started in WordStar (or any other text editor that produces ASCII files), complete with their structure. To my knowledge, Thoughtline is the ONLY outline processor offering this capability.

4 File structure

4.1 ASCII files, but . . .

Thoughtline files are described as "pure ASCII" files. The advantage is said to be that you can use the operating system's TYPE command on ASCII files.

WordStar, for the technically-minded, alters "bit 8" of some characters to keep track of soft spaces, soft returns and other matters that have to do with document formatting. Thoughtline never changes "bit 8", since it has no soft spaces and it uses hard returns throughout. Thoughtline marks the ends of paragraphs with the ASCII character 7Fh (normally defined as DEL = the delete key). When typed by the operating system, this character is either ignored or shows up as a graphics character.

5 Command structure

5.1 Inserting new topics – confusing at first.

When working at the outline level (as opposed to working inside a paragraph), hitting ↵ anywhere on the current line opens up a blank line BELOW the current topic. This is different from WordStar, which opens up a new line beginning at the cursor location. I found this confusing at first, but since each topic is a separate entity, Thoughtline refuses to split it in the middle.

5.2 Opening new file – like NewWord, not WordStar

If you open a file, and Thoughtline can't find such a file on the disk, it asks if you if it should create it. This idea is copied from NewWord and I found it mildly offensive at first, as if it was saying "are you sure you know what you're doing?".

However, it was helpful when I had mis-typed the name of the file I was opening. The proper solution to this problem is to have separate "Create" and "Edit" commands on the opening menu, as in some other word processors I've seen.

5.3 Lines start with – = + # but it's not always correct

If you open a paragraph under a topic, but then don't enter any text into it but just hit ↵ and close the paragraph, Thoughtline considers that paragraph to contain at least SOMETHING, so it displays the = or # flag on the outline.

5.4 Some commands are NOT like WordStar

Thoughtline is billed as having the same command structure as WordStar, but that is only partly true. Many of the conveniences that speed up WordStar for the experienced user are missing.

In fact, you could measure your depth of knowledge of WordStar by how much or how little you find missing in Thoughtline! For example:

5.4.1 ^R not available (but path naming under MS-DOS is)

Typing ^R from the opening menu, when asked for a filename, does not supply your last previous answer, and nor does ^D supply the previous answer one character at a time as in WordStar.

One version of Thoughtline I tested had tried to implement this feature, but the filename supplied by Thoughtline did not include the drive name, so that, e.g., after closing a file on Drive C, you could not immediately open the file of the same name on Drive B by typing B:^R↵ as you do in WordStar, because in Thoughtline this lost the first two characters of the filename.

On the other hand, the MS-DOS version of Thoughtline supports subdirectory path naming, which is missing in the MS-DOS versions of WordStar 3.3. So you win some and lose some.

5.4.2 Can't scroll the screen

There is no ^W or ^Z function such as WordStar offers for scrolling the screen around. The only way is to run the cursor to the top or bottom of the screen and then continue to push it against the edge of the screen. This is how you do it in SuperCalc, and is one of SuperCalc's few weak features, so I was surprised to see it repeated in Thoughtline.

When I opened a paragraph under a topic that previously did not hold a paragraph, with topic on the last line at the bottom of the screen, the cursor appeared to have frozen up, and I thought Thoughtline had bombed! Finally I realized I was trying to move down to a place where no text yet existed – something neither Thoughtline nor WordStar allow. Closing the "empty" paragraph solved the problem – but the ability to scroll the screen would help.

Also, WordStar never lets you place the cursor on the very last line. The value of this only became clear to me when I had the above bad experience with Thoughtline. In WordStar, at least the screen would have scrolled up one line if I had tried to move beyond the last line of the file. That would have given me a visual clue that I was in fact at the end of the file! But Thoughtline allows the cursor to go right down to the very last screen line.

5.4.3 ^KB and ^KK work differently

To mark one single line as a block in WordStar the correct, efficient technique is to place the cursor at the start of the line, press ^KB, move DOWN one line (NOT along the line) to place the cursor at the START of the NEXT line, and press ^KK. Only the ONE line is marked as a block. If you try doing it that way in Thoughtline, you find that since Thoughtline treats each topic as a complete entity, and you have marked TWO lines as a block.

Also, at present there are no block operations available in Thoughtline while editing paragraphs. The block commands function only on the outline. This enhancement is promised for one of the forthcoming releases, which all current purchasers are to receive at no charge.

5.4.4 No "global replace" command

In writing this article I wanted to write just "TL" everywhere, then globally replace it with "Thoughtline" when I was finished. But there's no global command to search or to search-and-replace. If you export the final document to WordStar, you can do such replacements there.

5.4.5 ^N doesn't work

In WS you can insert blank lines ahead of the cursor by using the ^N command. This is useful to break a paragraph in two, while leaving the cursor at the end of the first part so you can add more text. ^N doesn't work at all in Thoughtline.

5.4.6 Paragraph reformatting ^B works, but ^QP doesn't!

In WordStar, ^B reforms the paragraph you are working on, and ^QP then returns the cursor to the same spot where you were working when you typed ^B. I use this a lot to bring back into view any text that got pushed off the right edge of my screen when I inserted extra words in that line.

In Thoughtline, ^B works te same as in WordStar (except for a couple of minor bugs), but ^QP doesn't work at all! You have to MANUALLY reposition the cursor after EVERY ^B. Thoughtline should either install the ^QP command, or else create a new paragraph reformatting command that does not move the cursor to the end of the paragraph.

There are two bugs in the way ^B works:

FIRST, if you are in the (good) habit of typing two spaces between sentences, Thoughtline does not understand this practice and if the first sentence ends at the end of a line you will often get one of the spaces transferred to the start of the next line.

SECOND, if you delete to end-of-line (^QY), and in doing so you leave no spaces at the end of the current line, when you type ^B to reformat this paragraph, the last word on this line will be concatenated with (glued to) the first word that was on the next line.

Both of these suggest that Thoughtline's paragraph reformatting is using relatively unsophisticated techniques. WordStar handles both of these cases flawlessly; in the first leaving both spaces at the end of the previous line, and in the second creating a space as required.

5.4.7 Copying without a name creates a nameless file

If you copy a file with the O command and fail to give the copy a name (just specifying a drive like A:), you get a copy all right, but with NO NAME in the directory. Not only can you not edit this file – you can't even delete it! I know a way to remedy this in CP/M – you can rename such a file using NSWEEP. But in MS-DOS I know of no way to rename such a file with RENAME, COPY or CWEEP.

Nor was it rare for me to accidentally create a "nameless" file with Thoughtline. Being used to WordStar, I usually copy a file from C: to B: by typing just O (for cOpy), C:FILENAME↵ and then B:^R↵ Since ^R doesn't work in Thoughtline, this familiar sequence of keystrokes created a file with no name on C: every time!

5.4.8 NO menus – not even a status line!

Thoughtline has no menus. This may be fine for the experienced WordStar user, but for the beginner it may be a problem. It was the built-in, pop-up-when-needed menus that made WordStar so easy for me to learn at first.

Even if Thoughtline doesn't need menus for basic editing features, I would like to see a status line advising, e.g., whether I am in outline or paragraph mode, how many levels of indenting I am currently working at, and if I am in INSERT or REPLACE mode. Since Thoughtline maintains pointers in RAM memory to all of the topics in the outline, as well as holding in RAM the topic currently being edited, it would be helpful to see a message like *OUTLINE 58% FULL, TOPIC 68% FULL.*

5.5 Bugs!

There are a few bugs still in Thoughtline 2.1. Most of them have a workaround, and Spite promises to fix them in later versions.

5.5.1 The ^B (paragraph reformatting) command

The problems with the ^B command have already been documented above.

5.5.2 Style problems

On a point of style, heading numbers at the highest level do not end in a period: you get: 1 Review of Thoughtline instead of the more usual and less ambiguous: 1. Review of Thoughtline

5.5.3 Importing structured files

Importing a structured WordStar or ASCII document has two problems.

First, I found the computer hung up after Thoughtline had finished importing the file. After rebooting, I found the imported file was perfect except that it had lost the last line of the source document. Spite advises that this can be worked around by placing a dummy topic heading at the very end of the source file, like this:

.. 1

Second– and more serious for me – since Thoughtline assumes all lines beginning with two periods are structure definitions for Thoughtline, it does not know what to do with other comment lines you may already have in the file. For example, I frequently embed ruler lines in my WordStar files, as comments, like this:

..-!-!-!-!-!-!-!-

I can activate these as needed by using the ^OF command in WordStar. Unfortunately, Thoughtline was totally confused when trying to import files containing such comments! The workaround is to first do a search and replace on the WordStar file, finding ^N.. and replacing with ^N.IG before adding the structure comments beginning with two periods for Thoughtline.

The astute reader will notice that this would shift my embedded rulers one character to the right, so they would need to be corrected.

5.5.4 "Disk Full" – error messages not always there!

Like WordStar, Thoughtline makes temporary files on disk while it works. When my disk filled up during a work session, the result was most unfriendly. I lost all the work I'd done during that session, and the message *do you want to abandon your outline?* popped up when I tried to save the work (Thoughtline did not tell me that the disk was full – I found that out afterwards).

The solution here, as in WordStar, is to make sure before you start that there is room on your disk equal to at least THREE TIMES the size of the file you are editing.

5.5.5 DEL sometimes behaves strangely

If a topic is open, and the cursor is at the start of a line of text that immediately follows a blank line in the text, pressing the DEL key duplicates the text line (except the first character) in the blank line above. Strange! – but trivial to work around.

6 Cost of Thoughtline

Most of Spite's own original software sells at low to medium prices. For example, Thoughtline is only $69.95 plus shipping. The cost is said to include two free updates, which is just as well, since Thoughtline has a little way to go yet. It is not copy-protected, so you can back it up and protect yourself.

Thoughtline is available for most CP/M and MS-DOS computers. There will even be a version under development for non-standard MS-DOS machines (using their ANSI terminal driver), the unfinished version of which worked pretty well on the DEC Rainbow at the office, which is about as non-standard an MS-DOS machine as you can find!

Thoughtline's price is reasonable, and the product works well enough even in the present release to justify this price. The promised free upgrades should settle the matter!

7 Small memory version

Be sure to order the "small memory version" if you are using a hard disk or RAM-disk on a CP/M computer. The regular CP/M version will not work concurrently with these accessories, since they use up some valuable memory space. But the "small memory version" works fine.

There is no special version required for MS-DOS computers with hard disks or other devices attached.

8 Conclusions

8.1 Thoughtline's Best Features

Thoughtline is a straightforward outline processor. It has every feature I could imagine needing for outlining and reorganizing a document. The ability to exchange structured files with WordStar IN BOTH DIRECTIONS makes it a winner.

8.2 Thoughtline's Worst Features

Thoughtline has a little way to go yet before I will consider it to be "finished". Some features are totally missing, e.g., the commands for manipulating blocks don't work when a paragraph is open, and there are no search or replace commands.

Other features exist, but haven't been accurately or completely copied from WordStar, which was the author's stated intent. I expect these matters to improve in later releases, and they are relatively minor matters compared to the power which Thoughtline gives you.

8.3 Things to do with Thoughtline

Thoughtline's low cost and WordStar-like human interface makes it worth considering for an office with several technical writers for every secretary/copy editor. The writers can use Thoughtline, then give the final results to the copy editor to finish off in WordStar.

Thoughtline could also be used to outline a structured computer program, with successive levels of detail added as sub- topics, and the results converted to structured BASIC, PASCAL or dBASE language afterwards.

Finally, Thoughtline should be considered by anyone who considered WordStar but couldn't afford it. At $69.95, Thoughtline provides many of the features that casual users of WordStar actually use.

Only three features are missing: Block Move within paragraphs, special printer effects such as bolding, and the ability to see page endings on the screen and Block Move has been promised for the next release.

And given a trade-off between those features and Thoughtline's outlining capability – even if the price was the same – I'd choose Thoughtline.

8.4 The Last Word

Even though there are still a few rough edges, Thoughtline is already, in my opinion, the preferred outline processor for the WordStar user who wants to improve his/her personal productivity in creating and maintaining large and/or structured documents.

If MicroPro (the owners of WordStar) are smart, they will immediately purchase the rights to Thoughtline and incorporate all these features into WordStar itself! Until they do, I consider Thoughtline to be a "must buy" for the heavy WordStar user, and I'm looking forward to trying out the next release!

* * * * * * *

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GOING INSIDE

**Patch your Software
To fix a Bug or
Customize your System**

Line Height 10 for Disk Saved MailMerge Files

by Pal Mitsem

I finally got around to creating some pretty advanced boilerplate MailMerge documents for my business, but had a disappointment coming.

Unless the micro computer (a vanilla CP/M NCR Decision Mate 5) was hooked up to the printer (a Brother HR-15) for continuous output, I lost control of the line height parameter.

I have for years become used to Line Height 10 (4.8 lines per inch), but files saved to disk (with the "Disk Output" option in MailMerge) will come out with Line Height 8 (6 lines per inch) when printed (with the "Suppress page formatting" option).

WordStar 3.3 has an ingenious and fairly well documented installation routine and I thought it would be possible to gain control of the vertical movement of the printer through the "D – Custom Installation of Printers" option under the Winstall "Installation Menu".

I am not saying that this can't be done this way. However, the printer seemed to ignore the escape sequences that should control vertical movement according to the Brother Installation Manual. (I tried to spike the D Initialization and J Vertical Motion sequences with some of the gibberish from the Brother Manual, but to no avail.)

Looking around my bookshelf, I came across a reference to the + option that can be exercised from the 3.3 Winstall "Installation Menu". The menu itself is silent about this option (asking for A/B/C/D/E/F/X input). Nor is there any mention of it in the NCR WordStar manual.

In fact, this option does give access to a patch area from 100h to some 83Ah.

That left me with only one problem – I had no documentation of this patch area and I was stretching myself already. A further search around the bookshelf brought me across the *Portable Companion* from December 1982/January 1983 and an article by Thom Hogan (those were the good bad days) about the patch area for WordStar 3.0.

The locations are different in WordStar 3.3, but the sequence is generally the same. Poking around, I found the sequence described by Thom Hogan for 3.0 from 351h in the 3.3 patch area. (I have later discovered that the 3.3 installation program can take you straight to the label address, if you know the label, and if you are not thrown off by the use of the word "symbol" for "label".) The appropriate label is INITPF, I now see in Thom Hogan's article.

If any of you out there should be equally hung up on wide spacing between lines, here are the locations that need changing for WordStar 3.0 and 3.3 respectively.

3.0	3.3
0366	351
036A	355
036E	359
0372	35D
0376	361
037A	365

The default value at those locations is 08h, and can be changed to the value of your liking – in my case OAh.

There are many other parameters to be controlled in this way also, but most of them can be determined by WordStar in the file to be mailmerged and saved on disk (for my secretary to output in the same manner as most of my other documents), unlike, for some mysterious reason, line height. And even after changing the default line height, you may control it dynamically in normal WordStar usage.

* * * * * * * *

Underlining with a Dot Matrix Printer

By Tony Woozley

It is easy enough to get a dot matrix printer to give decent continuous underlining instead of the broken hatch marks that it likes to print (that has been documented often).

But you then have to stop it from underlining the blank space in the left margin whenever an underlined passage runs over from the end of one line to the start of the next.

There are several ways of achieving that; and the most satisfactory way is to configure the printer so that you will never have to think about the matter again.

It can be done equally well for WordStar 3.3 and for Perfect Writer.

WordStar 3.3

The abbreviated sequence of operations for configuring it is:

1. Run WINSTALL; at the Installation Menu choose B for Custom Installation of Printers.
2. At Printer Menu, choose D – Initialization.
3. Enter as the initialization code sequence: **1Bh 6Ch 8h.** (That is the command for an Epson printer, telling it to make a left margin of eight characters. Substitute for that whatever the right command for your printer is.) No entry need be made for deinitialization.
4. Choose X to return to Installation Menu, and choose C for Menu of WS Features.
5. Now choose N for Page Offset, and there enter Page Offset value of **0**.
6. Choose X to return to Installation Menu, X again to leave the program, and finally A to save the changes you have made. They will be written into WS.COM.

Perfect Writer

Here you have to run PFCONFIG to do the corresponding things.

1. At the first menu (Configuration Program Master Menu) choose 3 for PW default style parameters.
2. There make 3 – Left Margin: **0** micas
   4 – Right Margin: **4064** micas
3. Use ^G to return to Master Menu, and there choose 2 for Define Printer Types.
4. Choose 3 for Update existing printer definitions, give the name of the printer you want configured, and at 18 – Initialization String enter: ESC l ^Q ^H (that is a lower case l, not the numeral 1; and don't put any spaces between the commands). What you should see on the screen is: *^[l^H.* (Remember this is the command for an Epson printer.)
5. Enter ^G to return to the Printer Menu; then 6 for Main Menu; and again 6 to exit and write changes to PF.DAT file.

In future your printed files should appear with just the same margins as they had before, but you won't be troubled by any underlined blank space to the left of a printed line.

If you have an indented passage underlined from the end of one line to the start of the next, there is only one way to prevent all the blank space to the left of the second line from being underlined and that is to close the underlining command at the end of the first line, and open it again at the start of the second.

In WordStar you can see on the screen where lines begin and end. In Perfect put the passage in Verbatim or format to screen and determine the line endings from that.

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CALENDAR

Under this heading you will find the dates and times (in order of state and area code) of activities and events of the Affiliated Member Organizations. Listings are the responsibility of the groups' officers who must must send changes to **FOG** office before the first of the month prior to publication (December 1st for the January issue). For a list of other groups, send a stamped, self-addressed envelope to the **FOG** office. Please include a note with your geographical area. To verify the meeting date, time, or location, call the number in the right hand column. WC indicates wheel chair access to the group's meeting site.

Date	City	Group	Day	Time	Meeting Address	Contact No.
Oct 20	Anchorage, AK	63–GUIDE	3rd M	7:00pm	Grandview Gardens Library, Brogaw & Mt. View Dr	907-338-1811
Nov 11	Ketchikan, AK	89–KCPM	2nd Tu	7:00pm	1182 Black Bear Rd	907-225-9249
Nov 13	Sitka, AK	83–BUG	2nd Th	7:30pm	Confirm	907-747-8615
Oct 16	Soldotna, AK	18–PENFOG	3rd Th	7:00pm	Kenai Peninsula Community College	907-262-5801
Oct 25	Homewood, AL	49–FAOUG	last Sa	1:00pm	Homewood Public Library, 1755 Oxmoor Rd	205-669-4396
Nov 13	Huntsville, AL	125–NAOUG	2nd Th	7:00pm	First American Federal S & L, 4008 University Dr	205-881-0377
Nov 13	Fort Smith, AR	23–AFOG	2nd Th	7:00pm	Lewis Paint & Supply, 4900 Wheeler	501-646-4617
Nov 4	Tempe, AZ	100–TOG	1st Tu	6:30pm	Pyle Adult Ctr, Southern Ave @Rural Rd	602-994-0069
Nov 10	Fresno, CA	35–SMUG	2nd M	7:00pm	1434 West Shaw, Suite A	209-431-0480
Oct 23	Porterville, CA	66–SVFOG	4th Th	6:00pm	Olson Comp. Serv, 767A Porter Rd	209-781-4123
Oct 21	Stockton, CA	11–SOG	3rd Tu	7:00pm	Great American S & L, corner Ben Holt & Inglewood	209-951-4701
Oct 15	Long Beach, CA	130–OPEN	3rd W	6:30pm	CSU, Learning Assistance Center Ext 5350	213-498-4186
Nov 4	Campbell, CA	1–1st FOG SV	1st Tu	7:30pm	Campbell Public Library, 30 No. Central Ave.	408-371-8699
Oct 16	Cupertino, CA	1–1st FOG SV	3rd Th	7:30pm	Cupertino Public Library, 10400 Torre	408-371-8699
Nov 14	Castroville, CA	5–MBAOUG	2nd F	7:00pm	Castroville Fire Station Rec Rm, Speegle & Pomber	408-728-1416
Nov 3	Menlo Park, CA	68–SMOG3	1st M	7:30pm	Crane Place, 1331 Crane	415-325-2442
Oct 20	Menlo Park, CA	68–SMOG3	3rd M	7:30pm	Crane Place, 1331 Crane	415-325-2442
Nov 12	Oakland, CA	3–EBFOG	2nd W	6:00pm	Please call for new location	415-272-9099
Oct 23	San Francisco, CA	2–SFCS	4th Th	7:00pm	St. Aidan's Church, Goldmine & Diamond Heights	415-929-0252
Nov 11	San Rafael, CA	31–MOG	2nd Tu	7:00pm	Confirm	415-897-0629
Nov 11	Santa Cruz, CA	116–CP/MUSC	2nd Tu	7:00pm	Green Acres School, 966 Bostwick Lane	408-476-0504
Oct 15	Pleasant Hill, CA	60–MTDOG	3rd W	7:00pm	Hayward State U, Room 312, 3100 Oak Park Blvd.	415-933-2665
Nov 5	29 Palms, CA	114–HOG	1st W	7:00pm	High-Desert Servicemen's Center	619-367-2440
Oct 15	Arcata, CA	29–HOG	3rd W	7:15pm	WC Humboldt State Univ, Sci Bldg, Rm 126	707-445-2074
Nov 6	Santa Rosa, CA	56–NBFOG	1st Th	7:30pm	Valley Oaks Apt Rec Hall, 2600 Northcoast St.	707-546-0145
Nov 13	Fairfield, CA	6–MUGSY	2nd Th	7:00pm	Confirm	707-557-5162
Nov 2	Orange, CA	113–NOCOG	1st Su	2:30pm	Chapman College, Sci Bldg, Rm 128	714-952-5627
Nov 13	SanLuisObispo, CA	47–CCOG	2nd Th	????	Please call for time and location	805-528-2382
Oct 28	Santa Barbara, CA	69–OSBUG	last Tu	7:30pm	SB County Planning Room, 105 E. Anapamu St	805-687-8541
Nov 4	Santa Maria, CA	42–SMOG	1st Tu	7:00pm	Sears Savings Bank	805-937-1128
Nov 14	Chatsworth, CA	86–ONUG	2nd F	7:00pm	WC Wizard of OsZ, 20630 Lassen St	818-709-6202
Nov 11	Pasadena, CA	84–OKOK	2nd Tu	6:30pm	Winnette Lounge, Cal Tech Campus	818-794-3243
Nov 6	No Hollywood, CA	106–TUG-NET	1st Th	7:00pm	Valley Plaza Park Comm. Center, 12240 Archwood St	818-763-5410
Nov 3	No Hollywood, CA	106–TUG-NET	1st M	7:00pm	Mercury Savings, 5201 Laurel Canyon	818-763-5410
Oct 19	San Fernando, CA	106–TUG-NET	3rd Su	7:00pm	Church of Christ, 1226 Glenoaks Blvd	818-763-5410
Oct 28	Sherman Oaks, CA	106–TUG-NET	4th Tu	7:00pm	Central Savings, 4464 Van Nuys Blvd	818-763-5410
Nov 5	Sacramento, CA	61–SOG	1st W	7:30pm	SMUD Utility Bldg. (Main Aud), 1708 59th St	916-482-8804
Nov 12	Boulder, CO	65–BUG	2nd W	7:00pm	Univ of Colorado, Business School Bldg, Rm 101	303-494-8741

Continued next page

Date	City	Group	Day	Time	Meeting Address	Contact No.
Nov 6	Denver, CO	4–DOG	1st Th	7:00pm	Clements Comm Center, 1580 Yarrow, 2nd Flr	303-690-6301
Nov 5	Colo. Springs, CO	133–CSOG	1st W	7:00pm	Hewlett Packard (Spruce Rm), Garden of the Gods Rd	303-473-7647
Nov 12	Colo. Springs, CO	133–CSOG	2nd W	7:00pm	Hewlett Packard (Spruce Rm), Garden of the Gods Rd	303-473-7647
Oct 21	Colo. Springs, CO	133–CSOG	3rd Tu	7:00pm	Otero Savings, Hwy 115	303-473-7647
Oct 22	Colo. Springs, CO	133–CSOG	4th W	7:00pm	Hewlett Packard (Spruce Rm), Garden of the Gods Rd	303-473-7647
Oct 15	Ft Collins, CO	115–FTCOG	3rd W	7:30pm	CSU Indust.Sci.Comp.Lab, Rm 200, 200 W. Laurel	303-226-4156
Nov 12	Danbury CT	40–DOG	2nd W	7:00pm	Confirm	203-775-1102
Oct 23	Danbury CT	40–DOG	4th Th	7:00pm	Confirm	203-775-1102
Nov 13	Ft. Lauderdale, FL	91–FLOG	2nd Th	7:00pm	WC Harris Computer Systems, 2101 W. Cypress Creek	305-748-7237
Nov 6	Maitland, FL	20–CFLOG	1st Th		Confirm	305-282-4316
Nov 9	Miami, FL	26–GCCC	2nd Su	1:30pm	WC Fla Int'l Univ, Tamiami Campus Bld. DM-100	305-888-3154
Nov 6	Orlando, FL	16–GOCUG	1st Th	7:00pm	Photosound of Orlando, 1812 N. Mills Ave	305-295-5689
Nov 11	Tampa, FL	46–TBOG	2nd Tu	7:30pm	Jefferson High School	813-392-6169
Oct 28	Clearwater, FL	46–TBOG	4th Tu	7:30pm	St. Petersburg Times Bldg	813-392-6169
Nov 12	Jacksonville, FL	98–JOUG	2nd W	7:00pm	JEA Building (4th Fl), 233 West Duval St	904-633-4920
Nov 11	Tallahassee, FL	77–TCPMUG	2nd Tu	7:30pm	Episcopol Church of the Advent, 815 Piedmont Dr	904-878-4592
Nov 3	Athens, GA	81–CUGA	1st M	7:30pm	Call for more info	404-353-2127
Nov 10	Atlanta, GA	93–TOGA	2nd M	7:00pm	Emory Univ, Chemistry Bldg, Main Auditorium	404-636-1480
Call	Hilo, HI	124–HIFOG	????		Confirm	808-935-8678
Nov 12	Ames, IA	102–QCOG	2nd W	7:00pm	Confirm	319-386-3484
Oct 27	Davenport, IA	102–QCOG	4th M	7:00pm	Confirm	319-386-3484
Nov 11	Ames, IA	12–MWFOG	2nd Tu	6:30pm	(odd months) Ames Public Libr, 100 Merle Hay Plaza	515-769-2223
Oct 14	Des Moines, IA	12–MWFOG	2nd Tu	6:30pm	(even months) Younker's, 100 Merle Hay Mall	515-769-2223
Nov 12	Sioux City, IA	38–SOG	2nd W	7:30pm	Confirm	712-252-2182
Oct 26	River Grove, IL	80–CFOG	last Su	1:00pm	Triton College, 2000 Fifth Ave	312-654-0986
Nov 8	River Grove, IL	80–CFOG	2nd Sa	1:00pm	Triton College, 2000 Fifth Ave	312-654-0986
Nov 6	Lafayette, IN	34–HOG	1st Th	7:00pm	Confirm	317-494-1914
Nov 3	Bloomington, IN	87–IOU	1st M	7:30pm	Indiana Univ-Cyclotron Facility, 2401 M. B. Sampson	812-334-3234
Nov 4	Hutchinson, KS	137–HUTCH	1st Tu	7:30pm	Hutchinson Public Library	316-663-7678
Oct 28	Wichita, KS	21–OPEK	4th Tu	7:30pm	St. Pauls Methodist Church, 1356 Broadway	316-832-0447
Nov 8	Louisville, KY	64–PCCL	2nd Sa	1:00pm	Computer Emporium Training Ctr, Hurstbourne Plaza	502-459-6127
Oct 18	Lexington, KY	32–KOG	3rd Sa	12:00pm	Univ of Ky, Funkhauser Bldg, Rm 213	606-269-1684
Nov 10	Baton Rouge, LA	103–FLOG	2nd M	7:00pm	Johnson Equipment Co, 4264 Perkins Rd	504-923-0888
Nov 14	Lexington, MA	122–BOG	2nd F	7:30pm	Honeywell Electro Optical, Rt 2A	617-484-1863
Oct 28	Bedford, MA	122–BOG	last Tu	7:30pm	Mitre Corp, Rt 62	617-484-1863
Oct 15	Columbia, MD	101–OSBUG	3rd W	7:30pm	Florence Bain Senior Center	301-997-3246
Oct 20	Portland, ME	136–SMOG	3rd M	7:00pm	Portland Jetport Conference Rm	207-772-1616
Oct 16	Ann Arbor, MI	37–TOGA2	3rd Th	7:00pm	Univ of MI, Neuro Sci Bldg, 1103 East Huron	313-665-5753
Oct 20	Dearborn, MI	14–DEFOG	3rd M	7:30pm	Ford Tech Center Cafeteria, 1700 Rotundra Dr	313-671-5562
Call	Duluth, MN	118–DSO	????		Confirm	218-626-3344
Nov 13	Saint Paul, MN	111–TCOG	2nd Th	7:00pm	UM, St.Paul Campus, Rm B45, Classroom Off. Bldg	612-871-6076
Oct 28	St. Louis, MO	55–GatewayCP/M	4th Tu	7:00pm	Thornhill Library, 12863 Willowyck	314-991-4399
Oct 28	Kansas City, MO	97–MIZOG	last Tu	7:00pm	TWA Bldg, Floor 5, 13th & Baltimore	913-722-3349
Nov 10	Jackson, MS	58–MCS	2nd M	7:00pm	R & D Center, 7th Fl (Ridgewood Rd)	601-825-4151
Nov 10	Charlotte, NC	71–LOGIC	2nd M	7:30pm	Home Federal S & L Carmel Rd	704-377-1154
Nov 13	High Point, NC	107–TROGIC	2nd Th	7:30pm	Rm 2 (Ground fl) Wrenn Bldg, High Point College	919-766-5530
Oct 20	Raleigh, NC	8–ROCC	3rd M	7:30pm	Confirm	919-782-9576
Oct 21	Fargo, ND	117–O/KUG	3rd Tu	7:00pm	Civil Engineering Bldg, NDSU-Rm 216	701-282-5359
Nov 11	Lincoln, NE	39–Lincoln LOG	2nd Tu	7:30pm	Friendly Computer, 5530 "O" Street, Lincoln, NE	402-761-3393
Oct 15	Linden, NJ	138–JOG	3rd W	7:30pm	No. Jersey Christian Academy, Greir Ave	201-272-2073
Nov 6	Albuquerque, NM	127–AGOG	1st Th	7:00pm	Confirm	505-268-3606
Oct 16	Albuquerque, NM	127–AGOG	3rd Th	7:00pm	Confirm	505-268-3606

Continued next page

Date	City	Group	Day	Time	Meeting Address	Contact No.
Oct 15	Las Vegas, NV	25–VOG	3rd W	7:00pm	Confirm	702-452-2544
Nov 11	New York, NY	135–NYOUG	2nd Tu	7:00pm	93 Franklyn St, Corner of Church & Franklyn	212-594-5976
Nov 2	Liverpool, NY	82–SOUP	1st Su	2:00pm	8371 Redwing Dr	315-622-9209
Nov 12	W.Hempstead, NY	88–LION	2nd W	7:30pm	Adelphi Univ. Cont. Ed Center, Rm 110, Eagle Ave	516-781-2888
Nov 11	Rochester, NY	132–FROG	2nd Tu	7:30pm	Monroe County CoOp Ext Ctr, 249 Highland Ave	716-232-7272
Oct 15	Rye, NY	104–WOG	3rd W	7:15pm	Westchester Federal Savings Bank, 67 Purchase St	914-725-1098
Nov 12	Cleveland, OH	75–COG	2nd W	6:30pm	United Way, 3100 Euclid Ave	216-888-2078
Nov 3	Oberlin, OH	9–'Ob'Os	1st M	7:30pm	Oberlin College, Rice Faculty Lounge, West College St	216-775-8706
Nov 10	Uniontown, OH	44–AKCAN	2nd M	6:30pm	13100 Cleveland NW (office of Martin Olson)	216-837-8926
Oct 21	Cincinnati, OH	27–COG	3rd Tu	6:30pm	Central Service, 555 Gest St	513-232-4076
Nov 8	Mt. Washington, OH	27–COG	2nd Sa	2:00pm	Confirm	513-232-4076
Oct 25	Mt. Washington, OH	27–COG	4th Sa	2:00pm	Confirm	513-232-4076
Nov 13	Cincinnati, OH	27–COG	2nd Th	7:30pm	Confirm	513-232-4076
Nov 4	Dayton, OH	79–DOUG	1st Tu	7:30pm	St. Paul's Episcopal Church, 33 West Dixon Ave.	513-434-8207
Nov 13	Oklahoma City, OK	67–OKCPM	2nd Th	7:00pm	OSU Tech Center, NW 10th & Portland Ave	405-360-2141
Oct 23	Tulsa, OK	51–OUT	4th Th	8:00pm	Sheridan Library, 62 North Sheridan	918-587-3918
Call	Ashland, OR	54–RVOG	????		Confirm	503-773-1222
Oct 22	Portland, OR	57–PMS	4th W	7:30pm	Bonneville Power Ad Aud, 1002 NE Holladay St	503-228-6345
Nov 2	Eugene, OR	128–LOCUG	1st Su	7:00pm	Far West Federal Bldg, 96 East Broadway	503-747-8242
Nov 8	Lansdale, PA	121–PhROG	2nd Sa	9:30pm	Merck, Sharp & Dome, Sumneytown Pike	215-648-5862
Oct 26	Pittsburg, PA	50–TROG,PA	4th Su	2:30pm	Duquesne Univ, Mellon Sci Bldg, 600 Forbes Ave	412-661-2446
Call	Lancaster, PA	74–L-MUG	????		Confirm	717-285-4940
Oct 16	Lemoyne, PA	92–MIDPOG	3rd Th	7:30pm	One Stop Computer Shop, 65 North 5th St	717-763-7074
Oct 28	Greenville, SC	41–POGO	4th Tu	6:30pm	C.DouglasWilson Bldg, Basement Rear, 201 E North	803-233-3434
Nov 19	Oakridge, TN	13–SMOG	3rd W	7:00pm	(odd months) ECS, 136 Fairbanks Road	615-483-6857
Oct 15	Knoxville, TN	13–SMOG	3rd W	7:00pm	(even months) 11505 Kingston Pike	615-483-6857
Oct 23	Nashville, TN	119–MIDTOG	4th Th	7:00pm	Cumberland Museum, 800 Ridley Blvd	615-244-5343
Oct 28	Memphis, TN	15–MOG	4th Tu	6:00pm	Poplar/White Station Library	901-358-8128
Oct 16	College Stations, TX	43–AGGNOG	3rd Th	5:30pm	Texas A & M Univ, Blocker A&A Bldg, Rm 503	409-845-7770
Oct 15	Austin, TX	7–AEIOU	3rd W	6:30pm	Old Quarry Library, 7501 Village Center	512-836-3010
Oct 17	Houston, TX	76–OUCH	3rd F	7:30pm	UnivofHouston, 101 FarishHall, Kiva Rm, Cullen Blvd	713-931-1096
Nov 8	Houston, TX	108–CLOG	2nd Sa	9:00am	Confirm	713-482-7877
Nov 9	Amarillo, TX	28–POG	2nd Su	2:30pm	Amarillo Public Library	806-355-7509
Oct 26	Amarillo, TX	28–POG	4th Su	2:30pm	Amarillo Public Library	806-355-7509
Nov 10	Lubbock, TX	134–LOG	2nd M	7:30pm	WC TX Tech Law School, 19th & Hartford, Rm 202	806-742-3920
Oct 15	Provo, UT	30–KAOS	3rd W	7:00pm	488 S. 500 W.	801-225-8293
Oct 16	Salt Lake City, UT	105–SMOG	3rd Th	6:00pm	Sofshop, 2166 Highland Dr	801-268-2831
Oct 18	Norfolk, VA	78–TOG	3rd Sa	9:00pm	ECPI, 3661 Virginia Beach Blvd	804-497-5556
Oct 16	St Croix, VI	70–ST. COUG	3rd Th	6:30pm	St. Croix County Day School, Library	809-778-6651
Oct 15	Federal Way, WA	99–SKOG	3rd W	7:30pm	Highline Comm College, Gold Rm, Bldg. 4	206-824-3843
Nov 4	Seattle, WA	112–OEUG	1st Tu	7:00pm	NW & Alaska Fisheries Ctr, 2725 Montlake East	206-232-2763
Nov 3	Tacoma, WA	72–TOG	1st M	7:00pm	Parkland Library, 404 Garfield South	206-752-5582
Nov 12	Spokane, WA	123–SMUG	2nd W	7:00pm	Komputer Korner, North 2001 Monroe	509-482-7989
Nov 13	Richland, WA	19–TROG, WA.	2nd Th	7:00pm	Richland Public Library, Swift & Northgate	509-967-2430
Oct 20	Milwaukee, WI	22–MILWOG	3rd M	7:00pm	UWM-Engineering Building Room E495	414-255-0440
Oct 15	St. Albans, WV	59–Valley FOG	3rd W	6:30pm	Public Library, 6th Ave & 4th Str	304-727-8716
Call	Calgary, Alta	94–COUG	????		Confirm	403-239-5685
Nov 12	Vancouver, B.C.	17–VPCC	2nd W	7:30pm	Hastings Community College, 3096 E. Hastings St	604-298-6990
Oct 21	Victoria, B.C.	48–VICOG	3rd Tu	7:30pm	Canadian Forces Base Esquimalt	604-383-1512
Nov 10	Edmonton, Alb.	45–KOG	2nd M	7:30pm	Alberta Vocational College, 10215-108 St	403-464-5088
Oct 27	Toronto, Ont.	120–OUCT	last M	7:00pm	Parkdale Library, 1303 Queen St W	416-533-1531
Oct 21	London, Ont.	95–LOG	3rd Tu	7:30pm	UWO, Elborn College, Rm 2130	519-434-1944

Continued next page

Date	City	Group	Day	Time	Meeting Address	Contact No.
Nov 6	Westmount, P.Q.	73–Microcozm	1st Th	6:30pm	Hillside Armoury, 3 Hillside Lane	514-932-4164
Oct 16	Westmount, P.Q.	73–Microcozm	3rd Th	6:30pm	Hillside Armoury, 3 Hillside Lane	514-932-4164
Oct 22	Melbourne, Aust	131–VOUG	4th W	6:30pm	(even mons) RMIT, Swanson St, Bldg 12, Flr 9, Rm 908	818-5062
Call	Denmark	126–Formicro	????		Confirm	45-163-1760
Call	Paris, France	110–OUF	????		Confirm	43-44-82-65
Nov 6	Israel	33–IOUG	1st Th	6:30pm	21 Hankin Str, Magdiel, Hod Hasharon	0-523-4043
Nov 11	New Zealand	53–NZOG	2nd Tu	8:00pm	Univ. of Auckland, Human Sci Bldg, Rm 336	09 275-4310
Nov 5	New Zealand	109–CROG	1st W	7:30pm	Cafeteria of Trade Span (NZ) Ltd., 300 Taranaki St	640-479-1172
Oct 21	Edenvale, So Africa	90–JOG	3rd Tu	6:30pm	Civic Center	51-6304
Oct 15	RamsteinAB, W Ger	62–FROG	3rd W	7:00pm	Ramstein Air Base, Ramstein Rec Center	496-305-224
Nov 14	Hattersheim, W. Ger	24–AGOG	2nd F	7:00pm	Hattersheim Posthof	061-52-4210
Call	West Germany	36–CCD	????		Confirm	07-304-3274
Oct 22	Pensacola, FL	10–PFOG	4th W	6:30pm	West FL Regional Library, 200 West Gregory	904-476-8083
Call		85–MIST	????		Confirm	303-450-9608
Call		96–ERC-OUG	????		Confirm	301-937-7954

New Disk Release (cont. from page 18)

```
Filename        Description
-FOG/CPM.086:   Disk Catalog programs
//CPM086.DOC:
/JUN/86 .    :
MCAT    .DOC:  Reads the directory of you disk and adds it to a
MCAT    .SET:   MAST.CAT file automatically.  If you use CPM+,
MCAT45  .AQM:   you should also get NULL.COM on FOG/CPM.048
MCAT45  .COM:  Latest version of Disk Catalog Maintenance program
XCAT43  .AQM:
XCAT43  .COM:  Generates a cross reference listing of all files
XCAT43  .DOC:   listed in your MAST.CAT
XCAT43U .COM:  This version also lists user areas.
YANC-24 .COM:  Very easy, menu driven cataloging program with
YANC-24 .DOC:   optional screen handling files
YANC-24 .HIS:
YANCTERM.ANS:  ANSI standard terminal (DEC VT-100)
YANCTERM.APV:  Apple II with Videx 80 c
YANCTERM.H89:  DEC VT-52, HEATH H89, TRS80 4
YANCTERM.MA5:  Microterm ACT4, ACT5, ACT5A
YANCTERM.NSA:  North Star Advantage
YANCTERM.PRN:  Default ADM3A for Kaypro, Osborne, etc
YANCTERM.SAM:  NO Specific Terminal. Customize to suit
YANCTERM.SB :  Superbrain
YANCTERM.SOR:  Soroc IQ-20, Lobo Max-80, Actrix, NEC PC8001
YANCTERM.VEC:  Vector Graphics, etc. with Flashwriter board

-FOG/CPM.087:  Word Processing Utilities and Filters
//CPM087.DOC:
/JUL/86 .    :
ENSOFT3 .COM:  Converts 'hard' ASCII files to WordStar 'soft'
ENSOFT3 .DOC:   format.  Update from FOG/CPM.080 written in
ENSOFT3 .PAS:   Turbo Pascal
FILTER  .ASM:  Original source code for FILTER
FILTER  .COM:  'Softens' or 'hardens' files and strips
FILTER  .DOC:   print codes
FILTER11.ASM:  Strips high bit and control characters from
FILTER11.COM:   WS files
FILTER11.DOC:
FILTER61.COM:  Latest version of FILTER
FORM3   .COM:  Places colons after labels in source files,
FORM3   .DOC:   changes upper to lower case, removes tabs, and
FORM3   .INF:    formats comments.  See also FOG/CPM.010
MAGE31  .ASM:  Recovers a WordStar file from memory after a
MAGE31  .COM:   'disk full' error or system crash
PW2WS   .C  :  Translates Perfect Writer files to WordStar files
PW2WS   .COM:   PW format commands become WS comment lines
PWWS    .COM:  Converts Perfect Writer to WordStar files
PWWS    .DOC:
RESQ13  .COM:  Searches computer memory for text & allows you to
RESQ13  .DOC:   save it to a file. (Text recovery after a crash)
SAVE-WS2.COM:  Recovers WordStar text from memory to a file after
SAVE20  .DOC:   a system crash.
SOFTCR  .BAS:  MBasic program to 'harden' or 'soften' a file
SOFTCR  .DOC:
STRIP   .ASM:  Strips comments from assembly language source
STRIP   .COM:   files
STRIP   .DOC:
WSDOCON .COM:  'Softens' standard ASCII files
WSDOCON .DOC:
WSPW    .COM:  Converts WordStar to Perfect Writer files
```


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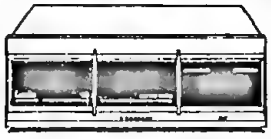

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FOG FONES

This listing of the **FOG** Remote Systems includes only those systems which were operating as of September 10, 1986. If you find that one of these systems is not operating (especially if you get a voice line when calling), please let us know. Systems with hard disks (*see* the Size column) usually have the FOG disk library for downloading. Many SysOps also provide techical assistance for their users.

System name	Baud	Hours	Size	Location	SysOp	Phone No.
	Sponsoring A.M.O. (Affilated Member Organization)					
FOG # 1	3/12/24	24 hrs	47Mb	Daly City, CA	Gale Rhoades	(415)755-2030
FOG # 4	3/12/24	24 hrs	92Mb	Belmont, CA	Roy Robinson	(415)591-6259
FOG # 6	3/12/24	24 hrs	11Mb	Daly City, CA	Jack Brown	(415)755-8315
FOG #10	3/12/24	24 hrs	20Mb	Harrisburg, PA	George Peace	(717)657-8699
King's Mountain	300/1200	24 hrs	20Mb	Woodside, CA	Troy Soult	(415)851-7732
Constitutional Pathway	300/1200	24 hrs	45Mb	Oklahoma City, OK	Whitney Boutin	(405)848-5317
	Oklahoma CP/M Users' Group (AMO #67)					
FOG #14	300/1200	24 hrs	10Mb	Urbana, IL	Jonathan Block	(217)344-4032
FOG #15	300/1200	24 hrs	47Mb	New York City, NY	Livingston Hinkley	(212)489-7370
	New York Osborne Users' Group (AMO #135)					
TUG-Net	300/1200	24 hrs	15 Mb	Chatsworth, CA	Bob Koller	(818)882-6045
	Technical User Group Network (AMO #106)					
Vallejo RCP/M (FOG 18)	300/1200	24 hrs	46Mb	Vallejo, CA	Ron Forsythe	(707)557-4403
Soft Stone	300/1200	24 hrs	20Mb	Louisville, KY	Curt Edwards	(502)241-4109
FOG #25	300/1200	24 hrs	21Mb	Davenport, IA	Matthew Reed	(319)326-3904
	Quad City Osborne Group (AMO #102)					
DeFOG's RBBS-RCP/M	300/1200	24 hrs	21 Mb	Detroit, MI	Bill Rice	(313)443-0365
	Detroit FOG (AMO #14)					
FOG #27	300/1200	24 hrs	10 Mb	Athens, GA	Bob Herrin	(404)354-0662
	CP/M Athens User Group (AMO #81)				co-SysOp: Scott Hartlage	
Bar-Ken	300/1200	24 hrs	10Mb	Boston, MA	John Kinsella	(617)288-4667
	Boston Osborne Group (AMO #122)					
MEBBS (FOG 31)	3/12/24	24 hrs	22Mb	Burlingame, CA	Jim Switz	(415)692-1406
FOG #33	300/1200	24 hrs	20Mb	Oakland, CA	Kenji Nakadegawa	(415)655-1206
	East Bay FOG (AMO #3)					
FOG #38	3/12/24	24 hrs	45Mb	Newark, CA	Gerald Wright	(415)792-3481
SMOG3 (FOG 40)	3/12/24	24 hrs	22Mb	Menlo Park, CA	Philip A. Moore	(415)323-4579
	SMOG3 (AMO #68)					
FOG #41	300/1200	24 hrs	10Mb	Elizabeth, NJ	George Porcella	(201)467-2739
	Jersey Osborne Group (AMO #138)					
FOG #45	300/1200	24 hrs	21Mb	Colorado Springs, CO	Ken Moon	(303)471-2415
	Colorado Springs Osborne Group (AMO #133)					
CFOG #2	3/12/24	24 hrs	10Mb	Chicago, IL	Bill Kuykendall	(312)235-7902
	Chicago FOG (AMO #80)					
Emerald Lake (FOG 48)	3/12/24	24 hrs	96Mb	Redwood City, CA	Dick Worth	(415)365-2650
					co-Sysop: Rich Skalsky	
FOG #49	3/12/24	24 hrs	23Mb	Wycoff, NJ	Peter Zuroff	(201)848-8217
Onyx RCP/M	300/1200	24 hrs	47Mb	Regina, Sask	Cris Ball	(306)949-1564
					co-SysOp: Roland Stoneham	

* *

Notice: The **FOG** office is open 10am to 5:30pm (Pacific time) Monday through Friday for calls from members. At most other times, a voice-activated answering machine (speak as long as you wish) is on the line. We will gladly refer you to the nearest local group, take a change of address or merchandise order, or answer most technical support questions. The phone number is (415) 755-2000.

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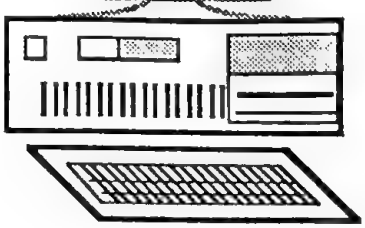

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ARTICLES

Requiem for a SysOp

Submitted by Jim Anderson
SysOp MSB, Billings MT

Excerpt from an article in PC WEEK, *Nov. 20, 1984:*

> *"There may be no such thing as a free lunch, but there is an ample supply of free software that's yours for the asking. All you have to do is dial up, make a connection, browse through a couple of menus, check over long lists of available software, make your choices and start downloading."*

* * * * * * *

Exchange of E-Mail Between SysOp and BBS User:

Well, John, the good news is that the faulty file has been fixed but the bad news is that your downloading privileges have been revoked. I just went through the last two months of logs and came up with some interesting statistics.

During that time you have logged on 23 times, downloaded 66 files and uploaded NONE.

You have called for chat twice, and left a total of two messages on the board, one requesting a specific program and the other informing me of a disk error in a download file.

I can only draw the conclusion that you are interested in this board for ONE REASON ONLY -- to rape h--- out of the download menus.

I've left plenty of messages regarding PARTICIPATION in the BBS and the Message Base, but you either haven't read them or else you ignored them.

Sorry, but one-way streets just don't hack it around here.

Jim.

****

Jim, I have been taking part in the BBS. Every time I log on I read all the new messages.

John.

****

John, I just can't help but feel that in all that time you could have at least said "Hi" or "Thanks for the downloads" or SOMETHING to acknowledge that there's a real live human being on this end.

Jim

****

Except for power failures, my computer has been continually running since November 11, 1982, and has fielded over 12,000 telephone calls operating as a BBS.

Then, it was a joy to be part of the realm of computer telecommunications – now it's a drag.

It seems to me that a "GIMMEE" attitude has pervaded the whole arena of BBSing, with callers interested in nothing more than material gains in the way of software.

My board is far from the busiest, being isolated in the "foreign country" of Montana, but an average day will see about 20 or 25 calls to the system.

An average day will also see about three or four messages (of ALL types, including E-Mail) being posted. The typical log entry shows so-and-so logging on, going to the file transfer area, downloading several files and then logging off.

Thanks; that's why I started up a BBS – to supply people with free programs. It really makes my day to see that I've spent all this time and money just to watch pigs at the trough.

What happened to the "communications" in telecommunications? Is this the result of the Computer Age, that people don't talk or communicate with each other? Are we getting so totally in tune with our equipment that we're excluding PEOPLE?

If so, then Orwell's predictions are tame in comparison with the reality. Who took the BULLETIN BOARD out of Bulletin Board System? The file transfer section of my board is shiny from daily use, but the bulletin section is obscured by cobwebs.

The thought has crossed my mind more than once just to load up a host program and let people grab whatever programs look interesting.

```
Do you have a logon code for this system (Y/N) Y
What is your account number? 775
What is your logon code? PASSWORD
INVALID LOGON CODE
Do you have a logon code for this system (Y/N) Y
What is your account number? 305
What is your logon code? PASSWORD
```

et cetera, ad infinitum et ad nauseum.

Hackers. Or so they'd like to believe. Vandals, pests, yes. Hackers? They should be so talented, devoted and lucky. Why do these computerized delinquents find such delight in trying to break into bulletin boards? Don't they realize that SysOps are ordinary people just like themselves trying to find a little enjoyment in their hobby? Why pick on me? I'm spending a lot of time and money trying to provide people a service for free, and they want to go and spoil it for everyone. Heck, if they want onto the system, all they have to do is apply for a logon. Why make life difficult for everyone? Leave me alone. Go pick on CompuServe.

Caller logs on. Leaves E-Mail to a friend. Lines only fill half the screen, so he's probably using a Commodore 64. Goes to file transfer section, and selects UltraTerm protocol. Chooses a file that indicates it's a TRS-80 program. BBS goes to send, he figures out that he's somewhere he doesn't want to be and drops carrier.

Another caller logs on four times in a row, but keeps losing carrier before he can logon. Probably phreaking on a cheapie phone service.

Another caller successfully downloads a file. Sit. Wait. Wait some more. System finally times out and drops him. I'm not the most polite person in the world and I'm certainly not one to stand on ceremony, but I am old enough to remember what manners were.

They also went down the tubes with "communications" and "bulletin boards." Whoops! Dropped carrier! So what? If it's a halfway decent system, it'll reboot.

Well, I'll just go to bed while downloading this long file – the system will eventually throw me off and reboot. Never mind that there's other people wanting to call into the board. Who cares that the SysOp climbs the walls when he sees someone drop carrier or time-out on the system?

Lately I've gotten into the habit of dropping carrier ON MY END for the worst offenders. One good hang-up deserves another.

Along with all the other goodies that have bitten the dust lately, there's good old APPRECIATION. As I mentioned before, my BBS has fielded over 12,000 calls. Out of all of them, I have gotten maybe a dozen messages saying "Thanks for running your BBS." That's about one "Thank You" per THOUSAND calls! Unfortunately, it seems that people think they have all this automatically coming to them. It's their right!

Sorry to disillusion anyone, but that just ain't so. The master switch for this system is two feet away, and I'm not so decrepit that I can't hit it in a flash.

Alternatively, I can ban anyone I wish from my system. Callers use this BBS at my forbearance only, and it's not a God-given right. It's a SysOp-given privilege! I sincerely feel that we should proclaim a "SysOp Appreciation Day." We certainly don't get any on a day-to-day basis!

Don't get me wrong. There ARE joys and benefits in running a BBS, although sometimes in my nether moods I'm hard pressed to enumerate them. But the fact is, there have been many occasions when I've rested my finger on the switch with the idea of going offline forever.

Now for the moral of the story. I'm only one SysOp among many, and I'm not trying to evoke sympathy for myself through this article.

The point is that almost every SysOp around has these feelings to some extent or another. And further, most of these SysOps (especially the best and most devoted ones) are going to reach a saturation point and wind up depriving the general public of their services.

I foresee a day coming, and very soon at that, when the high quality BBS's will be all gone.

So all this is really a plea for everyone to shape up their acts before it's too late. If nothing else, when you're on a bulletin board, leave a little message to the SysOp. "Thanks for the use of your system" or "Fine BBS you have here."

Let them know they're appreciated. When I see a message like that, I say to myself, "THAT's why I'm doing all this!" SysOps are real, live human being with feelings and emotions.

Let's start treating them as such!

* * * * * * * *

EPILOGUE: Twelve hours after the above was written, I find out that one of my best friends (with higher than normal access to the system) has allowed a third party to use her logon.

That's forbidden for anyone on my BBS to do, but it hurts even more because a valued and trusted friend who should have known better went and did it. That's the final straw. The Most Significant Byte BBS is no longer in existence.

Jim Anderson, Ex-Sysop
The Most Significant Byte BBS
Billings, Montana

* * * * * * * *

NOTE: I agree completely with Jim in his above comments, if not his action. I find it difficult to comprehend the mind of individuals, who take those of us who, through our generosity and good nature, are supplying them, free of charge, this service. Please note, this attitude of SysOps is spreading and BBSs around the country are disappearing or getting more difficult to access. I certainly hope this action in tiny Billings, Montana has some effect on the community of computerists.

Don't abuse a good thing!

Dave Williams, still SysOp
Magic City RBBS
Billings, MT

SysOps After All Are Only Human

Why, many of you will ask, have we printed an item written more than a year ago?

The answer lies in the subject matter.

Remote Systems provide the only method for spreading public domain programs around the country quickly.

With them you can get a program at 3am that will recover the file you need for work tomorrow. They allow a user in the wilds of Canada or Alaska to share in the "user experience" and let "early birds" exchange messages with "night owls".

Remote Systems have played a very important role in the growth of the computer industry; without them, much of the better software might never have been written.

As a SysOp of **FOG** #1, I am also a member of PRACSA (Public Remote Access Computer Standards Association).

PRACSA was started by a group of SysOps located in the Silicon Valley area who were having serious problems with abusive and abusing callers. Several were considering shutting down their systems and most were wondering why operating a Remote System had become such a negative experience.

When I became involved in PRACSA, I had just taken one of my computers, a hard disk, and a modem, and with the software modified by Jack Brown, put FOG #1 on line.

I was full of enthusiasm and short on knowledge. It seemed perfectly logical to invest several thousand dollars (remember, this was before the price slashing on hardware) for the dual purpose of making the **FOG** disk library available 24 hours a day while offering **FOG** members a chance to learn about modeming.

Like most SysOps, I didn't think of material gain. If I could learn while helping others also learn, that was payment enough. Jack and I spent long hours modifying programs, writing help files, and testing the systems (Jack's FOG #2 went on line a few days before FOG #1).

Once the systems were on line, we spent considerable time (10 to 20 hours a week, every week) answering messages, helping callers, and loading new programs and files onto the system.

And the reception made it all worthwhile!

Courtesy was the rule of the day. Messages were friendly and callers with problems had several answers within hours. Uploads (submissions to the Library and the **FOGHORN**) were as numerous as the downloads. Many callers helped with the maintenance by uploading new and modified help files. Callers voluntarily limited themselves to an hour a day.

The only complaint was that the two systems (one in Daly City and one in Vancouver) were always busy. So I modified another computer, got another modem, took the hard disk which had been used for membership records, and put FOG #3 on line from my home. (I later traded hard disks so that **FOG**'s was on System #1 and mine was on #3). Still later, **FOG** obtained a computer for #1 (for which I still supply the modem).

The next step was to obtain support from the Board of Trustees for the establishment of a **FOG** network of Remote Systems. The network would have two advantages. It would allow even more members access to the Disk Library between meetings of their local groups and it would enable willing novices to put up a Remote System with minimum difficulty and allow even more members to learn on systems designed for beginners.

But problems were emerging. I began getting obscene messages. I discovered the first of many attempts to "crack" the systems' protection. Fewer files were uploaded. More and more often, I found that callers were leaving private messages (which only I could read) asking for assistance. Yet in many cases, the answer was already posted on the system.

Sure, most of the problems are caused by those who are not **FOG** members. Closing down FOG #3 and restricting FOG #1 has eliminated most of *my* frustration.

We can help each other to become good users but how do we educate the thousands who are not **FOG** members? How do we ensure that other SysOps don't close down their systems because they can't take any more frustration?

PRACSA and other SysOp organizations provide the SysOps with an opportunity to share information. Like most self-help organizations, they also offer the opportunity to "let off a little steam". Many users will say I am exaggerating the seriousness of the problem. After all, each month many new systems going on line.

But how long do most of these systems stay on line? How many of you get registered on a new system and become accustomed to the peculiarities of that system only to find one day that the number has been disconnected?

I don't have answers for these questions. Do you?

Incidently, for those who are wondering, NO, the **FOG** Remote Network is not being abandoned. We simply needed to resolve a few problems, get new software distributed, and write new documentation.

Gale Rhoades

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Announcement from Nuevo

As many FOG members know -- they've been calling us to find out -- Nuevo is very much in business.

We've been very busy this summer and simply have not had time to get new artwork prepared for the FOGHORN. The many changes have made the previous artwork inaccurate and we asked that the FOG staff not use it.

For those who have ordered the Executive ESU (Enhanced Storage Upgrade) system, we have been promised delivery of the new circuits boards by month's end. This will permit us to fill all outstanding orders for these units. All other orders are shipped within a few days of receipt.

Nuevo is now planning future products. If you have an idea or have developed a product (either software or hardware), please contact us.

Nuevo Electronics Corporation
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WRITING TOOLS

If it's relevant to word processing, you will find it here.

Using a SUBMIT File to Save Lost WordStar Text

by Herb Lewis

You are in the midst of a crucial scene of a chapter of your greatest novel or are just putting the final touches to that important business report that is due the next morning!

The phone rings.

You hit ^KS to save your file and reach for the phone. Your conversation finished, you return to continue typing. With horror you read those fatal words, *DISK FULL*.

If this scenario hasn't occurred to you at least once, maybe you do not use your computer very much.

A number of solutions have been offered from various sources in the past. Erasing backup files on the Drive B, or logging back to Drive A (if you think space is available) are two possibilities.

Can you remember files that are .BAK? Then, an article in the April/May 1984 *Portable Companion* was published showing how both WS and MBAS files could be saved after a fatal error. The following utility is based on the information it contained.

The article details all of the elements necessary to save the portion of the file on which you were working. But a word of caution. It is not easy even for an experienced user, let alone an average neophyte or novice to maintain enough presence of mind to initiate a fairly complete routine that has been used when a Disk Full crisis occurs.

I've been there, and it does tend to leave you feeling numb and helpless, especially when you have about four pages of saved text that you were sweating over.

After consultation with a number of experienced user group members the following SUBMIT file provided a solution.

The first thing it does is save the text data stored in RAM to disk, which is a step "Saving Your ASCII" didn't do, and allows you to make backups before using UNDO.SUB.

It is set up to save about four pages of text (12K) under the assumption that in most cases this is the amount you are able to enter in 15 minutes, at which time you should do a save. It's a good habit!

```
;REMARK:WS RECOVERY FILE 5/28/84
;HERB LEWIS - 439-0554
SAVE 48 TXT
;
XSUB
DDT TXT
;LETS YOU SEE FILE BEGINNING IN DDT
;
D7330
;MOVE SAVED FILE TO 0100 IN MEMORY
;
M7321,9900,100
;RETURN CONTROL TO CP/M
;
GO
;
;SAVE MOVED FILE
;
SAVE 40 TXT
;
;END RUN
```

To use the above utility use the following procedure following a disk full error message.

1. Hit Escape
2. Hit ^C (return cursor to end of file)
3. Press RESET. (Yes, RESET.)
4. Remove data disk from Drive B
5. Place UNDO disk in Drive B. Hit ↵
6. Enter Submit UNDO.SUB↵
7. At prompt *DELETE FILE* type Y

The above procedure works because text remains stored in RAM even when the computer is reset or a BDOS error occurs.

DDT has the ability to access the internal memory, mark the beginning and end of text location, move the block to memory location HEX 100 where the CP/M SAVE command writes it to disk intact.

This UNDO.SUB file, along with SUBMIT, XSUB, D.COM and perhaps DISK, should be placed on a formatted and sysgened disk that is set aside solely for recovering files.

You might even consider retagging it for easy access in the event that that terrible moment pops up on you when it is least expected.

HAPPIER COMPUTING!

[From the San Diego Osborne Users' Group Newsletter.]

* * * * * * *

Dots and Printing in WordStar

by Jim Larsen

I have discovered that using dots when writing in WordStar can affect printing if the dots are at the beginning of a line.

When leaving out part of quoting material, I was taught to use three dots or periods to indicate the omission. In reforming paragraphs (^B), if one, two, or all three of the dots happen to begin a new line, guess what – no line. As far as the printer is concerned, the line does not exist, though it will appear on the screen when you try to find out what is wrong.

[WordStar has provided the user with the opportunity to leave comments throughout a document that will not be printed. The dot commands for comment in WordStar, to be placed at the beginning of a line are .. or .ig (ignore). But WordStar does not discriminate between dots at the beginnings of lines that are meant to be printed, such as in your example, and often, in my case, when dot commands are part of an article for the **FOGHORN**, *and those that are not. In my case, I just press the space bar once, which puts the dot in column two and the line will print. In your case, inserting ^PS^PS before the dot/s will allow the line to print. Inserting ^PS^PS does not take up any space and is the command for begin and end underlining. As there is nothing to underline, your printer ignores it and continues printing. Joanne]*

* * * * * * *

Two-Column Text with WordStar 2.26 and the UTOOLS

by Clyde McClelland

Dick Ezzard's comprehensive article, *Columns by WordStar* (**FOGHORN**, Vol.V, No.6) described a simple way, a not-so-simple way and the complicated way to format text in columns using WordStar.

In this article, I'll outline what I consider to be a fun way to achieve this objective with the aid of the UTOOLS developed by David H. Wolen. The UTOOL programs are available on FOG/CPM.116 through FOG/CPM.118, including full documentation.

Type your text, using WordStar in the Document (D) mode. Set margins, line spacing and other criteria to suit your taste. I use 52 columns and double spacing for easy reading, with hyphen help and justification OFF. Editors don't like these latter features, not even Joanne!

Complete your text and edit it carefully. This is the time for spelling checkers and other writing aids. Be thorough. WordStar 2.26 will consider each line of the final, two-column text to be a single line and editing at that time can be difficult.

When your document is edited, select its new format. For example: type ^OS and respond with 1, to set single line spacing. Then set the text to the width you desire for one of the columns in your two column document by typing, e.g., ^OR, followed by 30↵ for a 30-character column width. You may set right hyphen help and justification ON, if you wish, although text justified by WordStar 2.26 is not particularly attractive in narrow column widths.

Reformat the entire document from top to bottom with ^QQ^B. Scan the text to catch any peculiarities this new format might display. Tables, schedules and other irregular text can be adjusted now to improve their appearance. You may wish to delete the blank line that will appear between the paragraphs of text.

Do not reformat again; just save the document. It is a good idea to make a second copy of this master text in WordStar D format. You may need it.

To illustrate this procedure, let's call this file TEST.ONE.

Now the fun begins.

Put your copy of CAT.COM (FOG/CPM.118) in Drive A and a copy of the TEST.ONE single-column text in Drive B.

Log on Drive B and type:

```
A:CAT -W TEST.ONE >TEST.TWO↵
```

where TEST.TWO is the new name you selected for your document in its second incarnation.

The UTOOL, CAT.COM, will strip the high bit and clean up your WordStar file. This process is necessary before you can use the next UTOOL, HCAT.COM.

You can get the same result with PIP's Z parameter to zero the eighth bit in each character.

Put PIP.COM in Drive A. At the CP/M prompt, type:

```
PIP↵.
```

Then at PIP's * prompt, type:

```
B:TEST.ONE=B:TEST.TWO[Z]↵
```

Again with WordStar, this time in the N non-document mode, split TEST.TWO into separate sections, each section corresponding to one column on one page.

If you reformatted the original text with the aid of hyphen help, you must now replace each of the soft hyphens which were deleted by CAT.COM or PIP.COM.

To continue our example: say each column of the first page of the new two-column document is to have 55 lines. Type ^KB at the beginning of TEST.TWO. Scroll down 55 lines, using the N mode line counter. Place the cursor at the end of the 55th line, hit ↵ and then ^KK to mark the end of the block.

With ^KW write this block to a new file named, e.g., TEST1.TWO. Write out the next 55 lines as the right-hand column for the first page to a file named TEST2.TWO in the same way. Continue, until all of TEST.TWO has been written out in blocks to separate, new files.

You may adjust each column file for titles and column headings, or include empty space for art work by inserting blank lines as desired. Be sure to include them in the ^KB/ ^KK block and use the line counter to check the number of lines in the column.

Put your copy of HCAT.COM in Drive A and the disk containing these new files in Drive B. Log Drive B and type:

A:HCAT TEST1.TWO 38 TEST2.TWO >TEST1&2↵

This UTOOL horizontally concatenates the file containing the first 55 lines of 30-column text with the file containing the second 55 lines, and puts this two-column page into a file named TEST1&2. With the command illustrated above, the right hand column will begin at column number 38. Continue until all the single-column files have been conjoined in pairs, side by side. Any single column remainder can be printed out on a separate sheet with its text at the left side of the page.

As a final touch, each of these two column page files may be read, one after another, into a consolidated single file by WordStar. (Or by PIP.COM or CAT.COM.)

Some cautious, minor editing is possible with WordStar. Edit TEST1&2 and use ^KR to read in TEST3&4 and the rest. WordStar printer commands may be added. A left column heading, underlined with ^PS before and after, for example, will move the right column text on the same line four characters to the right.

Do not correct this change; the printing commands will not alter the position of the printed text. Print controls must be terminated at the end of each column line or their effect will run on into the adjacent column.

A word about the UTOOLS: I am not familiar with UNIX and have no compiler for C. Consequently, I delayed too long my examination of the contents of FOG/CPM.116-118. The UTOOL command files included on these disks provide many interesting and useful input/output management features.

* * * * * * *

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TELECOMMUNICATIONS

Communications Between Computers

Telecommunications on the Osborne 1

Karl Radov

Boston Osborne Group

[The author conducts university level courses on computer telecommunications for school teachers, holds workshops for Boston Osborne Group members and provides telephone support to users of many types of computers. The Osborne 1 is used in this article but the same MDM740 commands can be used on other computers with the same results.]

The Osborne 1 is quite easy to use in telecommunications applications. As with any new application, there are some complex parts that you as user must learn and master as part of the start-up process. Once these are mastered, communications via the computer can be an extremely powerful tool.

In this article I will outline a procedure to follow to set up a communications link via the O-1, make some suggestions for hardware and software, and suggest some practices I have found useful in getting set up and in troubleshooting.

Getting Started

In addition to the O-1, you will need a modem, a null-modem cable to connect the O-1 RS232 port to the modem, and communications software specifically set up for the O-1.

(If you are using a serial printer, you may need to get a switch box, since the modem must use the same RS232 port.) A modem will cost $60-$700 dollars depending on features, particularly speed, and the vendor from whom you buy. The proper serial/RS232 cable will cost $20-$40, and software, if you buy it, will cost $100-200.

I strongly suggest that you NOT buy communications software but instead try one of two excellent programs in the **FOG** library: OTERM4.COM (**FOG-CPM**.067) or MDM740.COM or its successor, IMP.COM (on the **FOG** Modem Disk for your particular computer. (See the inside back cover of the **FOGHORN** for details.) Each is available pre-configured for the O-1 (and there are MDM740 or IMP versions for almost every CP/M computer) and will meet the needs of 90 percent of all users.

Check your local user group library. Use MDM740 if you are using any "Hayes compatible" modem. Use OTERM with any other. If you must use proprietary software, try CROSSTALK or MITE.

If you are just starting, and aren't sure how useful communications may be, I suggest that you get a simple 300 baud modem, which will cost about $70. If you are willing to begin with a larger initial investment, then buy a faster "Hayes-compatible" 300/1200 baud modem.

I am currently using a SmarTeam 300/1200 baud Hayes compatible modem, which is available from a number of sources for less than $200. (See the list at the end of this note for sources and addresses.)

I am quite satisfied with the SmarTeam, as are the SysOps of several of the **FOG** Remote Systems who use them. Previously, I had used an Anchor Signalman Mark I 300 baud (which you may still be able to find for about $50), and an Anchor Volksmodem 300 baud (about $65, including the required "A" cable). There are lots of other modems that will work; just ask at a user group meeting before you buy.

To connect to the telephone network, you will need access to a standard modular telephone jack. (This discussion assumes that you are using a standard single line telephone system, NOT a multi-line or "key" system.)

If you already have three or more extension telephones (an automatic answering machine counts as at least one telephone) on the line you intend to use, you may need to remove one. Depending upon the location of the phone jack, you may also need an extension modular telephone cord ($8), a female-female modular telephone cord connector ($3), and a "Y" modular telephone connector ($3), all of which are available at Radio Shack and elsewhere.

Connecting the Hardware

When you have all of the necessary components assembled, you're ready to start connecting things. BUT FIRST . . . be sure you READ the documentation for the modem and software that you are using. Pay special attention to the section on installation. The modem documentation will describe the cables, etc., that you need. While reading first may be boring, it is strongly recommended. It is also helpful to have a knowledgeable person at hand.

Assuming you have the proper cable for an O-1 (with lines 2 and 3 reversed, and line 4 not connected, and with the correct "sex" DB25 plugs at both ends), plug the cable into the serial (RS232) port on the O-1 and the comparable plug on the modem. (NOTE: The O-1 end of the cable takes a male DB25. Different modems may require different connectors at the other end. Again, check at the user group, or find a knowledgeable dealer who will exchange an incorrect choice.

To solve the problem of mis-matched connectors, I made a pair of "gender changers", but you can buy these also.)

BE SURE THAT PIN 4 ON THE CABLE IS NOT CONNECTED. IF IT IS, BREAK IT OFF. (You can use needle-nose pliers, but be careful!)

Next plug the telephone cord that came with the modem into the nearest modular jack.

If it won't reach, or if one wasn't included with your modem, go to your nearest Radio Shack, and get the equipment mentioned a little earlier. (If you are going to plug the modem into a plug that already has a phone connected, you'll need the "Y" connector.)

Plug the modem power supply into the wall and the modem. (NOTE: Some modems may use a battery for power, or may draw power from the telephone line itself. CHECK the documentation.)

Now turn on the power switch on the modem, if it's a "Hayes" type. The first two and the sixth LED's on the front should go on. If it's an Anchor, wait a bit longer. (Other modems may have different requirements.)

Making the Software Run

Now turn on the O-1, boot the machine, and load the communications program you are using. You should have the documentation for the program (and the modem) at your hand.

Check the configuration of the software. In particular, you must use the correct "data-word format", transmission speed, and transmission mode.

The data-word format to use is:

1 start bit	may not be mentioned in documentation. Don't worry
8 data bits	
1 stop bit	may not be mentioned in documentation. Also OK
Parity off or ignored	

You should use a transmission speed of 300 baud when starting out.

All transmission should be full duplex.

To check the configuration of MDM740, at the COMMAND> prompt, type

?↵

and the configuration screen will be displayed. Then type: SET↵
300↵

(This is necessary since most 300/1200 modems default to 1200 baud). Be sure that LED #6 (labeled HS) has gone out.

To check the configuration of OTERM4, type

<ESC>S

and the status screen will be displayed.

Be sure that you are using the RS232 port and not the 9 pin modem port. If the configuration is not as suggested above, use the appropriate "Transmission mode" commands, (<ESC>m1, <ESC>m8, <ESC>mf) to set it up.

Since everything is working fine, it's time to dial out to your nearby friendly **FOG** Remote System or Compuserve, or whichever remote computer you intend to contact.

Be sure that you know the data-word format (and baud rate) that the remote expects. Most remote systems that expect to have a microcomputer call use the "8 bit, no parity" setting described above, but some systems don't.

If you use the wrong data-word format, it's just like talking in English to someone who only understands French.

The result is no communication and lots of frustration! So let's digress for just a moment.

A Short Digression, and an Explanation

Telecommunications involves using your computer to control the operation of another computer at a remote location. The "remote" computer is called the "host".

If you've ever used a timesharing service, or used a mainframe or mini via a terminal, the same thing is going on. You are connecting to the remote host via the telephone network, and another modem is connected between the host and its telephone line at the host's end.

As with any computer, in order to control the host, you must give it appropriate commands. In other words, you must know the commands that are required to run both your system (software and hardware) and the host system.

If you are calling a **FOG** Remote System, this information will be made available once you are connected. If you are calling a commercial service, like CompuServe, or a private system, it's a good idea to have the host's documentation available before you call.

Once you are on-line, everything you type at your keyboard is sent to the remote, where the host interprets it as a command. The host then executes the command.

This is great and is just what you want . . . except that occasionally you will need to send commands to your own software. To do this, the communications program you are using establishes some special sequence of commands which it recognizes and "traps". These special commands are not sent to the remote but will be acted upon "locally". (This creates a potential for incompatibilities, but that is a separate issue which I chose to ignore here. It will not trouble most users.)

To send local commands to your software when you are on-line in "terminal mode",) you use ^E for MDM740 (<ESC>E for IMP) and <ESC> for OTERM4.

Anything that follows is treated as a "local" command. Most of the documentation for each of these pieces of software is devoted to describing the various commands that each has available.

As a first-time user, you MUST have the software documentation available to be able to use these features.

Dialing the Host

Back to dialing.

If you have a "Hayes" compatible and are using MDM740, at the COMMAND prompt, type

CAL (If not, skip this next part.)

A new screen will display. (Ignore the menu of phone numbers that appears. You can set your own up, using M7LIB.COM, after you read its documentation.)

Just type the number you wish to call, including access codes, area codes, etc., using the keyboard, and press ↵ when you're done.

NOTE: MDM740 usually assumes that you have touch-tone service. If you are using regular rotary dialing, you must reconfigure MDM740.

If you are dialing via a switchboard, and must dial "9" to get an outside line, be sure to include the "9" in the number to be called and also follow it with at least one "," (comma).

The software will instruct the modem to dial, and you'll hear the whole process.

If the host answers the call, it will then transmit its modem "carrier" signal and your modem will automatically respond, and the electronic sounding noises will end. The modem's speaker will then shut off.

If you've called one of the **FOG** Remote Systems, the system will automatically begin sending to you.

But, MOST OTHER REMOTE SYSTEMS REQUIRE YOU TO NOW SEND TWO CARRIAGE RETURNS TO GET THEM STARTED.

After the host begins sending, begin the proper log-in sequence.

If you're using a manual dial/manual answer modem (either of the Anchor modems) and OTERM4, manually dial the number.

When you hear the remote answer and transmit its carrier signal, switch the modem to "DATA". (This turns the modem on.)

The electronic sounding noises will end. If you've called one of the **FOG** Remote Systems, the system will automatically begin sending to you.

But, MOST OTHER REMOTE SYSTEMS REQUIRE YOU TO NOW SEND TWO CARRIAGE RETURNS TO GET THEM STARTED.

After the host begins sending, begin the proper log-in sequence.

You're all set!

Some Additional Hints

At some point in your communications experience, you are going to have a problem. When it occurs, you will need to do some trouble-shooting in order to find the source of the trouble and correct it.

At that point, it is absolutely necessary that you have information available to help either yourself or the person you call for help. It is an absolute waste of time to call someone for help if you cannot tell them, with a high degree of detail, exactly what hardware, software, and remote system you were using, and detail what happened that was unusual.

My experience as a teacher and trouble shooter suggests that the clues are usually there in front of you. The trick is to recognize them as clues.

Since getting started with communications is complicated, I suggest that everyone get in the habit of keeping a communications "journal". The journal should contain the names, model numbers and specifications of your hardware and software. You should record the specific way in which your software is set up, including data-word format, parity, baud rate, and anything else special.

If in doubt, keep a record of it! (It's also a good idea to keep a record of your on-line sessions. See the last paragraph in this section for instructions on how to do it.)

For each bulletin board or other system (e.g., CompuServe, Delphi, Dialog, etc.,) you call, keep a separate page (or 3"x5" card) to record any special configuration requirements, your user ID and password, the particular procedure required to log onto the system, and any key commands you need to navigate the system. Keep this journal with you at the keyboard.

When you have a problem, write down exactly what happened, with as much detail as is humanly possible. To help whomever is trying to help you troubleshoot, You should know the answers to as many of the following as possible:

- *Has your hardware/software setup worked successfully on line before, or is this your first try?*
- *What system have you successfully connected to and used?*
- *What system were you (trying to get) on?*
- *What were you doing when the problem occurred?*
- *Had you dialed? Was the phone ringing? Had you received carrier?*
- *Had you exchanged carrier successfully? Had you logged on completely?, Were you receiving or sending data?*
- *What happened that was not correct?*
- *What data was destroyed or corrupted?*
- *Was the connection broken, or did you manually force a disconnect?*
- *Did your system lock up (ie. you couldn't even get into "local" mode) or did the remote system hang (i.e., characters you typed didn't "echo" on your screen)?*

* *What exactly was on your screen (the last few lines)?*
* *What were you trying to do when the problem occurred?*

As you can see, the more details you can provide, the easier it will be to solve the problem. Simply saying "I can't get my modem to work!" may say it all for you, but it is useless to someone trying to help you at the other end of a phone. Try to be precise and responsive to their questions. By all means have your documentation available.

And if you haven't read the documentation, be prepared for some annoyance on the part of the support person. They are not mind readers, nor are they getting paid: they are volunteering to help because they are willing to share their knowledge with other users. But they expect that you will be prepared.

When you are beginning, it's useful to record all of the material displayed on your screen for saving to disk. To do this, you must turn on the "log" in OTERM, or the "memory buffer" feature in MDM740.

The respective commands are <ESC>BC and ^Td:filename.ext.

This command saves all of the material displayed on your screen in a section of memory. It must be saved to disk before you go to CP/M, or the captured data will be lost.

MDM740 will automatically write it to disk in the filename you have designated, just use the WRT command to close your file. OTERM requires that you do this manually, using the <ESC>bo command, so don't forget.

As you will discover, keeping a log of your on-line sessions can satisfy many of your needs. It will enable you to capture the messages from a bulletin board system (BBS) and can be used to save information from any of the on-line utilities – like Delphi, CompuServe or Dialog.

All that is involved is ASCII text, and it can easily be retrieved from disk by WordStar for display or printing.

You also can use WordStar to edit the captured text, eliminating unwanted material, etc.

If you plan to regularly capture text via communications, you will surely want to get the programs ENSOFT2.COM and UNSOFT.COM (both on FOG/CPM.080), and FILTA.COM (on FOG/CPM.010), to simplify the task of editing these files with WordStar.

Transferring Files

There is much more to communications, HOWEVER, than just capturing ASCII videotex information. Transferring files, particularly programs, can be very useful. (When you transfer a file FROM a remote host TO your system, you are "DOWNLOADING" the file; when you transfer a file TO a remote host FROM your system, you are "UPLOADING" the file.)

Virtually all of the significant public domain programs that are in our library, and the libraries of most user groups, are available on remote systems. In the case of CP/M software, these systems are usually called RCP/M's (Remote CP/M systems).

In order to transfer files, particularly program files, you must use a method different from the one used for text file transfer.

I won't bother to explain why, but the key to file transfer is an error checking protocol. The most commonly used protocol is called "XMODEM" or the "Christensen protocol". And it's available in both MDM740 and OTERM.

To DOWNLOAD a file called FOO.BAR from a remote, you must do two things. First, you must tell the remote to send it to your computer. Then you must tell your computer to receive it.

From there the two computers handle the whole process. To download this file while on-line with the FOG Remote System (and in the CP/M section, NOT the Metal message section!) you would type:

KMD S FOO.BAR↵

After the remote replys, instruct your system to receive the file. Using MDM740, type:

^E
R FOO.BAR↵

and watch the screen as the transfer takes place.

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KMD R FOO.BAR↵

After the remote replys, instruct your system to send the file. Using MDM740, type:
^E
S FOO.BAR↵
and watch the screen as the transfer takes place.

Using OTERM4, you type:
<ESC>ps
FOO.BAR↵

There is lots more, but most if not all of the additional information you will need can be obtained once you are on-line. Read the information available on the system, and ask questions if you aren't sure.

Happy telecommunications!

Sources for modems and proprietary software mentioned above:

Anchor Volksmodem 300 Modem

1. Omnicom, 440 Maple, Wichita KS 67213, (800) 922-2329, advertising in the April, 1986 *Computer Shopper* (p. 212) has a "bare" Volksmodem 300 for $49.95 plus shipping. You will need to add an "A" cable, for about $10 more.
2. ELI Computers, 139 Hampshire St., Cambridge MA 02142, (617) 492-2345 may still carry the Volksmodem 300. They have in the past.

MITE Telecommunication Software

MITE is produced by Mycroft Labs, Inc, PO Box 4106, 2615 N. Monroe St., Tallahassee, FL 32315, (Information: (904) 385-1141; Orders: (800) 692-7638). There are three different CP/M versions, but the only relevant one is Mini-Mite at $95. It is available pre-configured for the Osborne 1 (and for the Executive and Vixen) directly from Mycroft, and may be available through dealers who carry CP/M software. If you can't find a local dealer, you can order it from:
Workman & Associates
112 Marion Ave.
Pasadena, CA 91106
(818) 796-4401

I think they still have the older version, called MITE+, which I believe includes some simple form of terminal emulation.

SmarTeam 300/1200 Modem

1. Spite Software, 4875 S.W. 19th Dr., Portland OR 97201, (800) 824-7888, in their 1986 mail order catalog, advertises a version of this modem as the TURBOLINK 1200. For $179.95, they include a one year warranty and 48 hour turn-around on repairs. For $20 more, they'll throw in a cable, MicroLink II software, and some free time on BRS and the Official Airline Guide.
2. California Digital, 17700 Figueroa St. Carson CA 90248, (800) 421-5041, advertising in the April, 1986 *BYTE* (p. 432) has a "bare" SmarTeam 300/1200 for $189 plus shipping. [I bought mine here.]
3. Wholesale Outlet, Dept BY, 1 Interstate Ave., Albany NY 12205, (800) 344-4387, advertising in the May, 1986 *BYTE* (p. 76) has a "bare" SmarTeam 300/1200 for $165 plus shipping.
4. Worldwide Access, 6311-L Desoto Ave., Woodland Hills CA 91367, (800) 826-3736, advertising in the April, 1986 *BYTE* (p. 418) has a "bare" SmarTeam 300/1200 for $178 plus shipping.

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CP/M Assembly Language Part I: Assembler Basics

by Eric Meyer

I first discovered this about two years ago, when I needed to modify the source code for a public domain modem program for an unusual application.

Since then, I've gone on to write a number of programs in assembler, ranging from some simple public domain utilities to the memory resident utility PRESTO!.

For many such applications, assembler is the language of choice: it's very compact and fast; it's the most efficient way to do simple tasks that deal with moving around bytes of data, such as copying and modifying files; and it allows the most sophisticated interfacing with the CP/M operating system, which is itself written in assembler.

Another nice thing is that you already have all the tools that you need to learn and use assembly language: nothing more to buy, unless your needs grow to be very sophisticated.

CP/M 2.2 includes the ASM assembler; CP/M 3.0 comes with MAC and RMAC. All you lack is instructions. Let me quickly mention two good books on the subject: *CP/M Assembly Language Programming*, and *The Soul of CP/M*. Both, while not complete language references, put a lot of emphasis on programming in the CP/M environment, which will have you doing truly useful things (like manipulating disk files) in short order.

Both are far more comprehensive than I can attempt to be here; I will just just present an introduction, and explain some basic concepts for those who would like to become literate in assembler.

Numbers play an important role in all that follows. Basically, everything in the computer is (or is represented as) numbers – such as the instructions that make up a program, or the operating system itself; characters of text and other data that you may be manipulating; addresses in memory where various data or subroutines can be found; and so on.

Only the context determines whether a particular value is to be interpreted as a number, an ASCII character, part of an address, or a machine instruction. This can be very powerful, but it's also potentially very confusing. (Pascal aficionados may need a strong drink before proceeding.)

All numbers in what follows are decimal, unless followed by a "H" (for Hexadecimal, base 16) or "B" (for Binary, base 2). Hexadecimal is commonly used in assembly language programming, as it's the most natural representation for the numbers from 1 to 255 (or 65535) that your computer manipulates on the most fundamental level.

If you're unfamiliar with these base systems, you may want to find or make a conversion chart for reference.

1. The CPU

The CPU (central processing unit) is the integrated circuit at the heart of your computer. It fetches your instructions, executes them, and keeps track in the meantime (via "interrupts") of all the other tasks your computer needs to have done.

Most CP/M computers today use the Z80 CPU, though some still use the 8080 (or 8085), which are very similar but don't have quite as many instructions.

These "8-bit" CPUs deal primarily with "bytes", numeric values from 0 to 255 (11111111B, or FFH); though two bytes together can also be used as a 16-bit "word", a value from 0 to 65535 (FFFFH).

In this manner, up to 64K (64 times 1024, or 65536, bytes) of memory can be addressed. Part of this memory will be holding the CP/M operating system; part will contain the transient program that is actually running at the moment; and part will remain available as data storage space for that program.

2. Assembly Language

The CPU has a moderate number of "instructions", each of which performs some simple but useful task: adding two values, fetching a byte of data from memory, and so on. Each instruction is "coded" by one (or possibly several) bytes, according to an arbitrary system. For example, C9H (201) is the "return" instruction, which marks the end of a subroutine.

On the earliest microcomputers, programs were entered as a series of such numbers, often with a row of eight mechanical switches: thus the sequence "on, on, off, off, on, off, off, on" would represent 11001001B, or C9H.

This was incredibly tedious. Today, having plenty of memory available to work with, you can write assembly language like any other language, using an editor to create a text file; a special program, the assembler, will translate the statements you write (e.g., the mnemonic "RET" for return) into the appropriate machine code.

The assembler functions very much like a compiler for a higher-level language. The difference is that a language compiler will incorporate prewritten library routines to perform many common tasks, and allows you to do very complex things with just a few statements. Thus when you write something like:

```
100 INPUT "DIAMETER:",D
110 PRINT "CIRCUMFERENCE IS:",3.14159*D
```

you are actually invoking a whole set of routines (part of your BASIC interpreter or compiler) that prints messages on the screen, gets input from the keyboard, stores and retrieves data values in memory, performs floating point arithmetic, and so on.

When you program in assembler, you have to write every single CPU instruction yourself. This can be a lot of work, since the CPU can basically do two things: move a byte from one place to another; and add, subtract, and do logical operations like "and" and "or" with byte values from 1 to 255.

Are you wondering how you would do floating point multiplication (C=3.14159*D) using an instruction set so primitive that it can only add and subtract integers from 0 to 255? The answer is that if you are sane, you wouldn't. There are tasks well suited to assembly language, and others best done in higher level languages. (Somebody has already written the floating point code that's part of your BASIC interpreter; take advantage of it.)

In assembler, stick to fundamentally lower level tasks, such as talking to your computer hardware (like memory and I/O ports), and manipulating disk files with the CP/M BDOS calls. For these purposes there is no better "language".

3. The Assembler

There are several common assemblers, but they all work in similar ways. CP/M 2.2's ASM is a good example of a basic 8080 assembler. MAC is a macro assembler, meaning that it lets you designate frequently-used blocks of code as "macros", and invoke them with a single name, much as you would a function call in another language – this is just a convenience.

RMAC is a relocatable macro assembler, meaning that it can produce output in a format that can be installed to run in different parts of memory as circumstances require; the usual assembler output is code intended to run only at address 0100H, the beginning of the TPA (transient program area) under CP/M. (This is not something you are going to need to worry about at first.)

Many commercial assemblers are also available, such as Microsoft's M80. Generally these are even more powerful, and frequently they can also take advantage of the expanded instruction set of the Z80 CPU.

My personal favorites are SLR Systems' SLRMAC (8080) and Z80ASM, both of which are incredibly fast relocatable assemblers, and can also generate COM files directly. But unless you get as heavily involved in assembly language as I have recently, it won't much matter which you use. The common procedure is:

1) Write the source code with your favorite text editor.
2) Run the assembler, typically producing a HEX output file.
3) Generate an executable (COM) file from the HEX file.

The first step will require learning the assembler instruction set. The second is usually as easy as typing A>ASM PROG; see your computer documentation for (probably minimal) instructions on assembler usage. The third is done using the HEXCOM utility under CP/M 3.0, or LOAD and SAVE under CP/M 2.2 (though a fine public domain utility called MLOAD is much easier than this combination).

4. Practical Tasks

Before we get into real assembler programming, it's worthwhile to note that frequently, what you need to do is not actually to write a program from scratch, but simply to get an existing program running the way you want. Good public domain utilities, for example, often allow a number of features to be changed, to allow proper operation on different computers, or just to conform to different tastes.

At the simplest level, the program's DOC file may just give a list of patching addresses. For example, the instructions for the (imaginary) XYZED text editor might include this information:

```
ADDRESS   VALUE
0130H     create BAKup files? (00=no, FF=yes)
0131H     copy buffer size in bytes (0...3000H)
```

This indicates, for example, that you can get XYZED to create backup files or not, as you like, by changing a particular byte in the COM file. The easiest way to do this is to edit XYZED.COM with a utility like EDFILE, PATCH, or DU; find the value at address 0130H; and change it, if necessary, to what you wanted. That's all you have to do; XYZED must be designed to check the value it has at 0130H, and adjust its behavior accordingly.

Sometimes the installation process can be more complex. Modem programs, for example, typically have to have very different basic routines to talk to the I/O hardware of different computers. Here there will often be a whole "overlay"; an assembler source file containing an actual listing of portions of the program.

You will have to edit this file, then assemble it and merge it with the rest of the COM file. This can require knowledge of some basic assembly language, but sometimes it can also be as simple as changing data values.

Let's begin by considering a handful of simple assembler directives. These are not actually CPU instructions at all; they are merely instructions to the assembler, regarding where to put code, and the insertion of data values. You will see these used frequently in overlay files.

5. Assembler Directives

ORG (origin): tells the assembler the address in memory at which the following code, or data, should be put. Most programs, e.g., begin with "ORG 0100H", since transient CP/M programs load in at address 0100H, the beginning of the TPA.

END: marks the end of an assembler source file.

EQU (equate): assigns a numerical value to a label. This isn't a "variable", as its value cannot change, and it generates no output code; it's merely a convenience.

DB, DW (define byte, define word): like the "DATA" statement in BASIC, instructs the assembler simply to insert the following numerical values at the current address in memory. Presumably the program is going to refer to them as data at some point.

Consider the XYZED program again. Instead of merely giving a table of patch information to go by, as described above, it might have provided you with an overlay file XYZEDOV.ASM which would include the following instructions:

```
;XYZEDOV.ASM installation overlay
YES       EQU     0FFH
NO        EQU     0
ORG       0130H
BAKFLG:   DB      YES         ;create BAK files?
                              ;  (yes or no)
BUFSIZ:   DW      0800H       ;copy buffer size,
                              ; in bytes
END
```

The semicolon ";", like REM in BASIC, indicates that the rest of the line is simply a comment, to be ignored by the assembler.

The two EQUates tell the assembler to substitute the number FFH (255) everywhere "YES" occurs in what follows, and 0 for "NO".

Not only is this convenient; it also makes the code more understandable, by making it clear that a value is logical (yes/no), rather than just an arbitrary number (like 255).

This kind of thing always helps in assembly language, which is prone to be very confusing otherwise.

The ORG statement tells the assembler that the following code or data is to be put starting at address 0130H in memory. In this case, XYZED.COM expects to find these data items at this address.

The labels "BAKFLG:" and "BUFSIZ:" are just for the purpose of identification here, though in an actual program, labels can function as names for variables or subroutines, as we'll see later.

The "DB YES" inserts one byte of data (in this case "YES", or FFH) at the current address (in this case 0130H, set by the ORG statement).

The "DW 0800H" inserts a word (two bytes) of data at the current address (now 0131H, since the previous byte went at 0130H). In fact, two-byte values are stored "backwards" or low byte first, so the assembler is actually going to put the 00H at address 0131H, and then the 08H at 0132H. So this file has instructed the assembler to set up the following sequence of three data bytes:

ADDRESS	DATA
0130H	FFH
0131H	00H
0132H	08H

If you now assemble this file, with a command like

```
A>asm xyzedov↵
```

you will get an output file XYZEDOV.HEX which contains the HEX version of this code, a compact (though still ASCII text) format frequently used as an intermediary between source code and (unreadable) machine code. If you looked at the HEX file, you would see something like this:

```
:03013000FF0008F5
```

which can be read as "three bytes, starting at address 0130, as follows: FF, 00, 08". (The last value on the line is just a checksum byte for safety.)

You can then use a utility like MLOAD to merge this HEX file with the program XYZED.COM itself:

```
A>mload xyzed.com=xyzed.com,xyzedov.hex↵
```

and you will have a new copy of the XYZED program, with the values changed accordingly.

6. Coming Up. . .

In future installments we'll learn about the 8080 CPU and its instruction set, and explain how to use CP/M BDOS calls.

* * * * * * *

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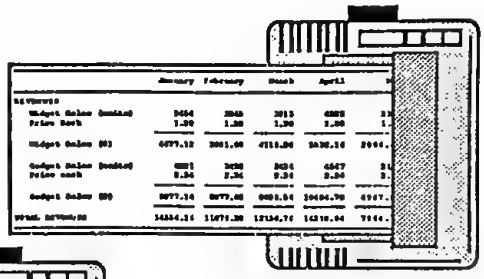

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MANAGING DATA

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dBASE Corrections

by Jerry Boyce
LOGIC Librarian

The article dBASE II Data Base File Structure by Jim Holmes on page 58 of the April 1986 issue has some errors which should be corrected before he or someone else starts using DUU or DDT to make some changes in a .DBF file.

When I received the April issue, I had just completed an extensive hack of the .DBF file structure and was in the process of preparing an article for the **FOGHORN** on how members could make changes in the structure of the data base file without the destruction of the .DBF or any effect other than what was planned by the use of EDFILE.COM. (See article following this piece.) I would assume that the same changes could be made using DDT.COM or DUU.COM.

The listing used by Jim Holmes is repeated *(next column)* with the explanation for the corrections that should be made.

Note that bytes 01 and 02 are used to list the number of records in the .DBF file. This is the reason that you are limited to 65,535 records in the .DBF file as this is the highest number that may be expressed by a two byte HEX number which is FFFF.

Also byte 12 in the field descriptor limits the field size to 254 spaces. The HEX number for 254 is FEH and is one space short of the maximum HEX number that could be used. My guess that the reason for the 254 field spaces is that the use of the FFH for 255 spaces could cause problems somewhere else.

---

dBASE II Tip

If you own dBASE II version 2.3b, you really must get the upgrade to version 2.43*. I know, it has not caused you any difficulty *yet.* But unless your guardian angel guarantees to continue watching over you, disaster will come when you can least afford it. Upgrade now and avoid frantic calls to the **FOG** office when your datafile is corrupted or your command file disappears.

Gale

BYTE #	CONTENT
0H	Always 02 to designate a .DBF file
01 - 02H	Number of records in the .DBF file in hex and in the standard CPM reverse order, i.e., hex number for 750 records is 02EEH would be listed as EE 02.
03 - 05H	Last update as MMDDYY
06 - 07H	Record length in hex. This requires 2 bytes since a record may be up to 1000 bytes long. The record deletion marker (*) is placed in the reserved first byte of each record.
08 - 207H	32 by 16 byte arrays for the 32 permitted fields in each dBASE record.
208H	The terminator for the header. This is 00 or a null only if the full 32 fields have not been used in which case it would be 0DH or a ↵. If less than 32 fields are used in the .DBF, the 0DH or ↵ would be in the first byte of the first blank field and the balance of the allocated space will be filled with 0's.
209H	The starting location for the .DBF records. This is 1AH if no records have been added and will be a space (20H) if a record has been placed in the DBF file and has not been deleted. This is the space that would contain the delete mark (*) if the record is deleted.

The 16 byte array (0 thru 15) for each field is used as follows:

BYTE #	CONTENT
0 - 09	Field name in ASCII and if the name is less than 10 characters the spaces are filled with 0's.
10	Always a hex zero
11	Type field in ASCII (C, N, or L).
12	Field size up to 254 characters or FEH.
13 - 14	Used by dBASE II.
15	Number of decimal places for numerical or "N" type fields else it will be 00H.

* * * * * * *

Modify a dBASE II Data Base File Structure

by Jerry Boyce
LOGIC Librarian

Recently, EDFILE.COM (from FOG/CPM.020 and one of my favorite programs), and about 15 minutes of work saved me several hours sitting and watching the screen click of *xxx files copied.*

After some highly improper coercion and since I am retired and have nothing important to do, I "volunteered" to write the programs to set up a computer cardfile for my wife's political group. They wanted to start entry into the file immediately so the data base file was set up and the command file for the entry screen written.

I planned to do the balance of the programming later as I thought it would take a month or two for them to make the entries.

Wrong again!

Within a week they had filled over 2300 of the approximately 3500 cards of 164 bytes each and planned to finish in the next two to three days and get out two different mailings.

Now I have a problem! Most of the programming had been done previously for similar projects and I planned to modify these by changing the names and adding and adjusting fields. This was done and I had about 70K of command files ready to go, I thought.

Now place the .DBF file on another disk and run. Wrong again!

I don't believe that I have ever seen so many "unknown field" and syntax errors. After about an hour of checking various command files and they all appeared to be correct, I had the brilliant idea of looking at the structure of the .DBF file and there was the answer.

The DBF file listed the two name fields as "firname" and "lasname" and the command files called these "fir:name" and "las:name" and the four logical fields were in as constant fields.

Now I have two choices:

(1) To spend several hours copying over 2500 records to a delimited file and back to a new .DBF file, or
(2) Go through about 70K of command files and hope you make all the changes.

There must be a better way. On a separate disk and using a small .DBF file and EDFILE.COM, I made the changes detailed below and all of the command files ran just as planned.

You can use EDFILE.COM to make some modifications to a .DBF file without destroying the file as you would with MODI STRU but there are limitations and these will be detailed later.

Figure 1 (next column) reveals the header structure of the .DBF file and the information contained in each byte. As this is not a .COM file the initial location is 0000H or location 1 using CP/M's method of counting.

dBASE II reserves the first 520 bytes or 0000H through 0208H of the .DBF file for the header. This is what you see if you issue the command to dBASE to "disp stru" and the first record begins at location 0209H or the 521st byte.

FIGURE 1

```
LOC.   00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F  0123456789ABCDEF
       -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --  ----------------
0000 - 02 50 09 00 00 00 A4 00 4D 41 49 4C 41 42 45 4C >......$.MAILABEL<
      |--|-----|--------|-----||
       |    |       |      |   |-> Start of field name in ASCII
       |    |       |      |-> Size of each record in bytes. (164 bytes)
       |    |       |          Two bytes used if over 255 bytes.
       |    |       |---> Date of last update as MMDDYY
       |    |---> Number of records in the .DBF file. (2432 records)
       |         (Note the CPM reversal of the 16 bit number (0980H)).
       |---> File type identifier. 02H designates this as a
             dBASE II .DBF file


LOC.   00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F  0123456789ABCDEF
       -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --  ----------------
0010 - 00 00 00 43 23 03 7C 00 46 49 52 4E 41 4D 45 00 >...C#.|.FIRNAME.<
       -----|--|--|--|-----|---|
            | | |  |    |    | |---> Start of second field name
            | | |  |    |    |---> Number of decimals places if N type
            | | |  |    |---> used by dBASE
            | | |  |---> Field size in bytes. ( 35 spaces )
            | | |---> Field type ( C, N, or L )
            | |---> Always 00H or null
            |---> End of space allocated to fieldname.
```

Note: Position 08 or the first byte of the first blank field field requires requires a ↵ or 0DH or if all 32 fields are used the 0DH will be at position 0208H of the .DBF file.

FIGURE 2 (next page) shows only the ASCII section of the EDFILE screen since all changes are made in this section. Both the before and after screens are shown for each of the changes.

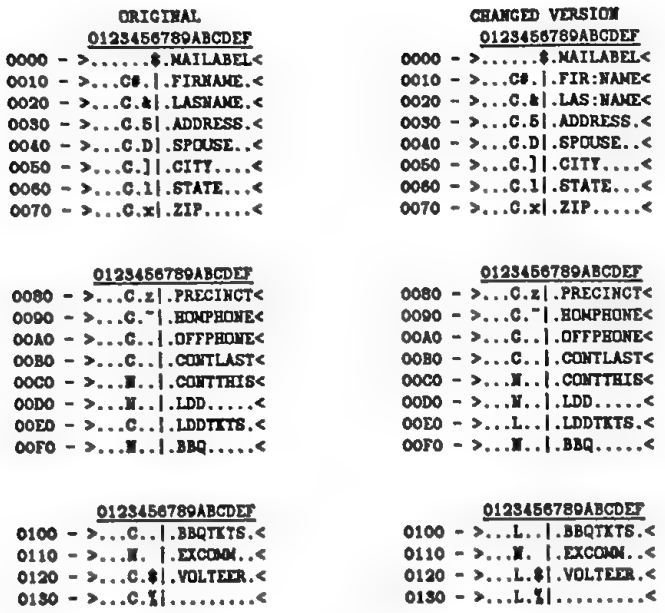
On the first screen the colon was placed in the "firname" and "lasname " fields. The file is called by typing at the A prompt

A> *edfile filename.dbf* ↵

The .DBF extension must be stated. When the screen is up, press *E* to get into the Edit mode then press ^*E* to move the cursor into the ASCII area. Move around the area by use of the arrow keys. The upper case letters are typed in and then a ^*W* is used to save each screen when editing is complete and a ↵ will move you to the next screen.

Note: When a change is made in the ASCII section EDFILE will automatically show the same change in the HEX section. You do not have to move over to make the change. The reverse is also true so that if you are following instructions from a book or a hacker, you do not have to figure out the ASCII change; just make the change in HEX.

FIGURE 2



```
          ORIGINAL                                CHANGED VERSION
        0123456789ABCDEF                        0123456789ABCDEF
0000 - >......$.MAILABEL<                0000 - >......$.MAILABEL<
0010 - >...C#.|.FIRNAME.<                0010 - >...C#.|.FIR:NAME<
0020 - >...C.&|.LASNAME.<                0020 - >...C.&|.LAS:NAME<
0030 - >...C.5|.ADDRESS.<                0030 - >...C.5|.ADDRESS.<
0040 - >...C.D|.SPOUSE..<                0040 - >...C.D|.SPOUSE..<
0050 - >...C.]|.CITY....<                0050 - >...C.]|.CITY....<
0060 - >...C.1|.STATE...<                0060 - >...C.1|.STATE...<
0070 - >...C.x|.ZIP.....<                0070 - >...C.x|.ZIP.....<

        0123456789ABCDEF                        0123456789ABCDEF
0080 - >...C.z|.PRECINCT<                0080 - >...C.z|.PRECINCT<
0090 - >...C.~|.HOMPHONE<                0090 - >...C.~|.HOMPHONE<
00A0 - >...C..|.OFFPHONE<                00A0 - >...C..|.OFFPHONE<
00B0 - >...C..|.CONTLAST<                00B0 - >...C..|.CONTLAST<
00C0 - >...N..|.CONTTHIS<                00C0 - >...N..|.CONTTHIS<
00D0 - >...N..|.LDD.....<                00D0 - >...N..|.LDD.....<
00E0 - >...C..|.LDDTKTS.<                00E0 - >...L..|.LDDTKTS.<
00F0 - >...N..|.BBQ.....<                00F0 - >...N..|.BBQ.....<

        0123456789ABCDEF                        0123456789ABCDEF
0100 - >...C..|.BBQTKTS.<                0100 - >...L..|.BBQTKTS.<
0110 - >...N. |.EXCOMM..<                0110 - >...N. |.EXCOMM..<
0120 - >...C.$|.VOLTEER.<                0120 - >...L.$|.VOLTEER.<
0130 - >...C.%|.........<                0130 - >...L.%|.........<
```

Since my problems were now solved, I decided to play with EDFILE to establish what could and could not be done with a .DBF file. It appeared that I had about worked it to the limit.

Changes that may be made to a .DBF file with EDFILE:

1. Any changes wanted to a field name within the normal limits established by dBASE for field names.
2. Field types may be changed, however you want to be careful that the change does not conflict with the data in the field or other dBASE operations. You would not want to change the zipcode field to numeric even though all entries are numerals. If you did this, you would be unable to "index on lastname + zipcode" since the indexed fields must be of the same type.
3. Find and remove EOF markers.

Changes that may NOT be made to a .DBF file with EDFILE:

1. Fields may NOT be added or deleted.
2. The length of fields may NOT be changed.
3. Field order may NOT be changed.
4. It is best not to attempt to add decimal places to a field. It may done but you loose a lot and changes also have to be made in your command files if you use the PICTURE statement. A two place decimal uses three spaces and you cannot increase the length of the field.

EDFILE.COM may also be used to recover a .DBF file after you have used MODI STRU and you forgot to copy the file to a TEMP file or your temporary file was lost for some reason.

Above we stated that location 209H is the first byte for record No. 1 in the DBF file and the first byte for each record is a space or 20H and is the byte used for the " * " in deleted files.

If you look at this location on a newly created DBF file before any records have been added, you will find a "1A". If you proceed with MODI STRU after the warning issued by dBASE, a "1A" is placed in location 209H.

To recover the DBF file with EDFILE, go to location 209H (on the third screen after the .DBF file is loaded by EDFILE) and place a 20H at the location. This recovers your file and you may LIST it from the dBASE dot prompt but this is about all that may be done with it until the recover is complete.

The other change that MODI STRU did was to wipe out the number of records in the file. This information must be replaced at locations 01H and 02H.

If you did not make a note of the number of records in the file, the number may be obtained by using the LIST command and waiting for the last record to show up.

If you have 255 records or less, the hex number for the number of records is to placed in location 01H. Over 255 records you will have a 4 digit hex number for the number of records and the last two digits will go into location 01 and the first two digits will go into location 02. The hex number for 256 records is 0100H. The 00 goes at location 01 and the 01 will go into location 02.

The file used above is a good example as this file contained 2432 records and the hex number for 2432 is 0980H. As will be seen above the 80H is at location 01 and the 09H is at location 02. Once this is done (and provided that you changed only a field name or field type) you should be up and running.

WARNING ! ! ! — I strongly suggest that you practice using EDFILE.COM on a copy of your file or better still, create a small DBF file of 20 to 30 records from your mai[illegible] before you start to work on your only database copy.

⇒

Need Help Writing dBASE commands files?

Check out the **FOG** Disk Library for programs other members have written. Modifying these programs to suit your needs is faster and less frustrating than reading the manual.

Bonus! Mail Label Program

Here is a quick one across mail label program – just change filename and variable names to match your data base file.

```
* **** MAILLABL.CMD
*
* Program to print a mailing label using
* 15/16 X 3.5 inch one across labels.
*
erase
use maillist
* optional margin statement for a better
* appearance to to the label or if you have
* a movable tractor the label may be move
* over to give the margin.
set margin to 2
* enter a carriage return and line feed
store chr(10) + chr(13) to newline
set print on
* use list off to prevent printing of record
* numbers.
* the semicolon must be placed at the end of
* each line except the last to make it a one
* line command.
* Use more or less "newline" statements to
* adjust to your label.
* Additional address lines may be added such
* as "company+newline+;"
list off trim(firname) + " " + lasname + ;
newline + address + newline + ;
trim(city) + ", " + state + "  " + zip + ;
newline + newline
set print off
release all
return
```

* * * * * * *

Locating a Character String in a dBASE File Field

by Jeff Kasavan

The April 1986 **FOGHORN** had an article by Dave Luehring (p. 52) on locating a character string in a field in a large dBASE II file. His purpose was ". . . to locate a character string which is believed to appear SOMEWHERE in a particular field in a large dBASE II file . . ." His method was quite complicated and there is a better way.

Both dBASE II and dBASE III support substring searches! Using Dave's example of a file of aircraft ownership information:

```
Structure for file: B:ACFT.DBF
Number of records: 01705
Date of last update: 12/17/85
Primary use data base

Fld     Name    Type    Width  Dec
001     REGISTR C       005
002     SERNO   C       015
003     MAKE    C       011

 . . . etc.
```

Let's assume you want to find an aircraft with 423 as part of the registration number. Type:

DISP FOR '423'$REGISTR↵

All records which have the string *423* in the REGISTR field will be displayed. If none of records have *423* in this field, the dBASE prompt will be displayed.

How does it work?

The $ is the SUBSTRING LOGICAL OPERATOR. It searches for the substring on the left inside the string on the right. Either or both terms may be string variables as well as string constants. It is a very powerful operator. Using the example, if you didn't know the order of the numbers of the airplane you want you could type:

DISP FOR '423'$REGISTR .OR. '432'$REGISTR ;
.OR. '324'$REGISTR .OR. '342'$REGISTR .OR. ;
'234'$REGISTR .OR. '243'$REGISTR↵

Hope this is helpful.

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COMMODORE 128

Comments on the C128 CP/M

by Glynn E. Stafford, Jr

I wanted to make some comments about the Commodore 128 CP/M after the review in the July *FOGHORN* since I am trying to encourage C128 CP/M users to join FOG.

Commodore released its version of CP/M+ before all the capabilities were built in (the computer comes with the August '85 version of BIOS). There is now a 6 December '85 version of CP/M+ *[available on the FOG/CPM.121 library disk]* that adds the following capabilities:

* The keys are now repeating and the repeat speed can be adjusted;
* The RS232 port is now supported so a modem can be used;
* Standard printers are now supported so you can use Epson and IBM compatible printers (the other version only supports Commodore printers); and
* The RAM expansion is supported as RAM-disk (so you can have Drive M: as a very fast 512K disk drive). This is only a test version but the source code to upgrade the BIOS is in the public domain on FOG/CPM.121.

[In another similar article, Bud Rasmussen and Bob Dodson add that the latest version of CP/M+ that they are aware of is dated 8 December 1985 and is packaged with the 128K and 512K RAM expanders. They add: "As to how it differs from the December 6 version – who knows? Being of suspicious nature, we suspect some BIOS tweaking was necessary for use of the RAM expansion as a RAM-disk – but this is speculation."]

There are public domain programs available to speed up the disk drives (write operations take place with automatic verify – by turning off the automatic verify, write operations run faster) and format disks in the standard MFM formats.

There is also a configuration program (CONFIG.COM) available that will change options such as:

* Use ASCII printers instead of Commodore printers;
* Change the repeat speed of the keyboard;
* Change responsiveness of the keyboard (e.g., how often the keyboard is scanned for keystrokes);
* Turn off the 40 col video chip to gain a slight increase of computer speed;
* Change the colors of the screen and characters; and
* Change the RS232 parameters.

CP/M+ on the C128 runs faster than CP/M 2.2 on the C64 but slower than other CP/M computers because the Z80 processor is only running at 2mz.

The 1571 disk drive is faster than the 1541 disk drive, CCP.COM is stored in Bank 0 so that warm boots are almost instantaneous, but 128K does not provide enough disk buffer space to significantly increase disk speed.

Using the 512K memory expansion as RAM-disk does make a big difference in speed. The Z80 processor had to be slowed down to allow the 8502 processor to share the same memory.

When CP/M is asked to do I/O operations, the Z80 portion of BIOS stores the I/O request in memory and switches to the 8502 processor. The 8502 portion of BIOS carries out the I/O operation and stores the results in memory. Control is then returned to the Z80 processor. Commodore did this because the I/O routines are already in ROM.

To add a printer you have to either get one that is designed for the Commodore's serial port or use an interface for the standard parallel printers. There are interfaces to attach parallel printers to the Commodore's serial port, RS232 port or to the user port as a parallel printer.

The reason that C128 formatted CP/M disks only have 160K or 340K storage capacity is not because the operating system takes up data storage space. On C128 disks, the first two tracks contain the boot sector and the disk directory. There are no system tracks.

CP/M+ is a larger operating system than CP/M 2.2. However, C128 CP/M disks only have 35 tracks per side instead of the normal 40 tracks per side on MFM CP/M disks.

This is to make the disks compatible with the native Commodore disk format. You can get more storage capacity by using MFM formatted disks, but disk operations are slower.

All the graphics and sound capabilities of the C128 are available in the CP/M mode. This makes the C128 an interesting CP/M computer. However, since graphics and sound capabilities are not standard on CP/M computers, these capabilities tend to be hardware dependent. Only a few CP/M programs use these abilities at the moment.

There is a version of the Perfect series of software for the C128 that uses graphics characters (the character set can be redefined) to use pop-up menus to pick the options for Perfect Writer, Perfect Filer and Perfect Calc.

I like this better than using control characters. There is a version of NewWord (a WordStar clone) for the C128 that takes advantage of the screen display abilities to show underlining and boldface print on the screen (I would rather see enhanced print than the control characters on the screen).

A big problem with using the C128 as a CP/M computer is that CP/M experts tend not to know C128 hardware details and Commodore experts tend not to know about CP/M.

Rassmussen and Dodson add that two terminal programs for the C128 appeared around the time of the new release as well – MEX and IMP. MEX supports most standard Commodore 300 Baud modems and Hayes-type 1200. IMP supports 1200/2400 Hayes compatibles including Commodore's new 1670 1200 Baud modem. IMP appears to work with all remote systems we have tried whereas MEX has not.

When purchasing or downloading programs, keep in mind that Osborne programs are the most compatible. The C128 emulates an ADM31 terminal, however, and most Kaypro programs can be isntalled using this terminal setting.

On final tip from Rassmussen and Dodson: if copying C128 CP/M format disks, the fastest method we have found is to use FAST HACKEM 3.0. This will not work on the "other" C128 readable formats, (Osborne, Kaypro, etc.).

[IMP for the C128 is available on a C128 Modem Communications disk. CONF is on FOG/CPM.121.]

* * * * * * * *

OSBORNE VIXEN

Vixen Tips

by Joanne Bransdon

If you are a new Vixen owner, these few tips may help you NOT run across common problems Vixen users are often writing to us about.

As you know, when you boot the Vixen, a menu comes up from which you operate. That menu is generated by the turnkey program.

First common problem: No turnkey menu appears on boot up.

The reason: You have a write protect tab on your disk.

The menu program cannot operate if there is a write protect tab on the disk. With the Vixen, the turnkey program operates like the SUBMIT program on the Osborne 1 and must be able to write to a disk.

As a general rule, write protect tabs should not be put on working disks. Many programs have safety devices built in, that, in the case of a disaster, you can save your material if you can write to a disk.

Second common problem: Osborne 1 disks won't run on the Vixen.

The reason: The Vixen has double sided drives and can't permit a sysgen of single-sided disks (as per the O-1). The Vixen can read the single sided disk but cannot run it.

The solution: Use PIP or NSWEEP to transfer the material on the single sided disk to a double sided disk.

Third common problem: The disk from my Osborne 1 can't be read on the Vixen.

The reason: You formatted the disk in the Vixen before you formatted it in your Osborne 1. When you put that disk in the Vixen, it reads the old format information on the reverse side of the disk and thinks it is double sided, so the directory on the single sided disk is in the wrong place.

The solution: Use FIX on FOG/CPM.035 to erase the information on the reverse side of the Osborne 1 disk, and the Vixen will read it correctly as a single sided disk.

* * * * * * *

OSBORNE I

A Common Problem With (Some) Disks and Siemens Drives

by Henry G. Belot

If you have an Osborne with Siemens drives, you may have experienced the problem I used to have. Your almost-new disks suddenly become troublesome. You slip them in the slot of your disk drive, but the latch won't close. You eventually discover that if you first insert a "good" disk into the drive, release the latch just enough to allow you to remove the disk, and then slide your "bad" disk in, the latch closes and everything works fine.

That was a problem I had for a long time. At first it occurred with only one brand of disks but eventually it started happening with other brands. When I finally opened up my Ozzie (for another reason), I discovered the real problem.

The Siemens drives have plastic fingers along the sides of the drives which detect the presence of a disk. They will not allow you to close the latch unless the disk is inserted in all the way.

The problem with the one brand of disks was that the envelope had thinner cardboard than the other brands and they were flexing slightly when they came in contact with the fingers. Therefore, so far as the drives were concerned, the disks had not been pushed in all the way and they would not allow you to close the latch.

The solution was simple. I folded a piece of plastic tape around the front edge of each side of the disks. This provided enough reinforcement or additional width to trip the fingers correctly. An alternative approach might be to open up the Ozzie and put some tape on the fingers.

OSBORNE EXECUTIVE

A Monitor for the Executive

by Alex. F. Burr

For Executive owners who want a monitor larger than the 7" built-in screen, there is a standard RCA jack for an external monitor.

I felt no need for one, as the original screen was clear, sharp, and in just the right location for easy reading. Then the dreaded cold solder joint struck. The monitor picture collapsed into a bright vertical line and then died completely.

This event was a disaster as I was just about to print out the mailing labels for a newsletter.

I use DEVICE to redirect the screen output to the printer, so I could keep track of how my label program was progressing; but the need to change paper to print the labels meant that I had to have a monitor.

A borrowed one showed the major fault of the Executive monitor circuit. The picture had shifted so far to the left that the first columns were lost and, like most inexpensive monitors, this borrowed one had no horizontal adjustments except for horizontal hold.

The local computer shop was not much help either. It had long ceased to carry the Executive and estimated it would cost $200 to fix the built-in monitor.

Then I ran across a flyer from the local discount appliance house. There amidst the VCR's was a 12" computer monitor on sale for less than $100. It was amber too. It was touted as suitable for the Commodore, but a monitor is a monitor so I went to look at it.

I found a nice looking, beige, 12" amber monitor by Magnavox (model BM-7622). (There was also an identical one, except the CRT was green, model BM-7652.) Most importantly, the monitor had not one but three separate horizontal adjustments. It looked like it had a good chance of working on the Executive. Its specifications were video input signal: composite video, 1 V p-p, negative sync, RCA connector; video bandwidth: 20 Mhz (very good); horizontal resolution: 900 lines. All this and it had a complete 12 month warranty on manufacturing defects. It even had an audio input, although the audio output was only 0.3 watts; but I would not be using that feature anyway.

But what convinced me were the horizontal adjustments on the back – hold, size, and centering.

Just to be on the safe side, I made sure that I was able to return the monitor if it did not work on my Exec. The monitor with three different interface cables, one of which was a straight RCA plug to RCA plug which would work with the Exec.

The instruction manual was of limited use. It advised the new owner to "carefully read the manual so that you will understand the operation of your monitor and how to adjust the customer controls". It neglected to tell you how to adjust them however. The most helpful operating hint was to "be sure that your monitor was plugged into a POWERED electrical outlet." It did, however, name and locate all the adjustable controls, so I proceeded to turn on the monitor and the computer and to adjust everything in sight.

The screen was rock stable, so I did not touch the vertical or horizontal hold. However, as is usual for the Executive, the WordStar image was so far to the left that the first columns were lost off the screen to the left.

First, I reduced the horizontal size of the image, then I shifted the image to the right. The range of adjustment available in both of these cases was quite limited, but just enough to get the entire image on the screen. (Be sure to stop turning the shift adjustment when the image no longer moves.)

In order to see the bottom line easily, I had to reduce the vertical size a bit. As there is no vertical centering, this left the top line a bit below the top when the bottom line came on screen, but this asymmetry is not important.

When the monitor warmed up after use, the image expanded just a bit and shifted to the left; but there was enough adjustment available for the controls to just squeeze all the image into the visible part of the screen.

There were some other standard controls. The front panel volume control I would not use, but the standard brightness and contrast controls are on the front too. They, as expected, were easily adjusted to suit my taste. Furthermore the initial adjustment even held as the monitor warmed up, something that inexpensive monitors do not always do.

The quality of the screen is quite satisfactory. The words on screen do not appear as sharp as the original monitor built into the Executive, but that is not the fault of the monitor.

I have set it on top of the computer so I am closer to it than I should be for comfortable viewing, so I probably will try to fix my original monitor when I have the time to take my Executive apart.

In the meantime, I have found an inexpensive solution in this very flexible and surprisingly cost effective external monitor.

[Most inexpensive monitors have a horizontal width coil inside them that can be adjusted to fit the entire image on the screen. It usually looks like a hollow tube about the diameter of a pencil with a 'tire' of wire around it and a moveable 'plug' inside the tube. Often there is a silkscreened legend on the circuit board that tells you what the coil is for and makes it easier to find. Jack]

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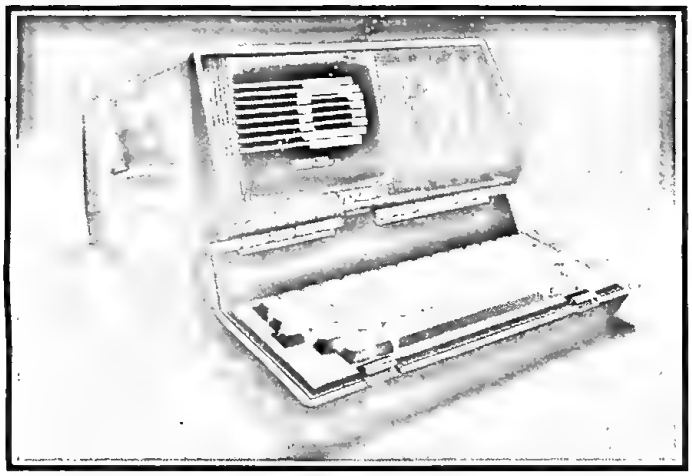

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